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October 3, 1921

AN ANALYSIS OF CERTAIN THEORIES
OF TRUTH

BY

GEORGE BOAS



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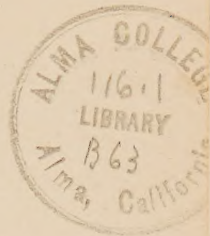
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PREFATORY NOTE

The man who would make a study of any philosophic problem encounters at the outset of his work difficulties which seem almost insuperable. He finds that his problem, far from being the simply definable discipline which first appealed to him, is the generator of a series of other problems almost without limit. He finds, too, that those ideas whose novelty was so thoroughly satisfying are after all neither his own nor the better exposition of another's.

Besides these difficulties, inherent in philosophic research, there are scruples of taste to hamper one's free expression. One hesitates, for instance, to chime in with the facile lyricism that is so prominent a part of our contemporary literature. The most objective problems today seem to be often a vehicle of personal feeling. One cannot help contrasting this with the method of Plato, of Aquinas, of Spinoza, a method illuminative of a personality the more forceful for being so self-repressive. And then again, one hesitates to strike that other note, perhaps a concomitant of lyricism, the note of belligerence. Active polemic



is to be sure a sign of healthy vigor. But reading our philosophic journals inspires the thought that perhaps we are too interested in healthy vigor to be concerned with philosophy.

Be that as it may, this essay is written with a full, perhaps an exaggerated, consciousness of these difficulties. The fertility of the problem has been frustrated constantly lest what is after all only an essay turn into a set of books. In order to indicate that certain implications have not been omitted through ignorance, possible digressions or continuations have been noted in the composition. It is hoped that unity has not been gained at the expense of thoroughness.

Again, wherever it was discovered that any views in this essay had been anticipated by other writers, references were given to their works, usually with full quotations, even in those cases where the results were attained independently. Such quotations will be found in the notes in almost all cases, for it seemed best, for the sake of clearness, to reserve the body of the essay, none too clear in any event it is feared, for the running argument itself. When no reference is given, it means not that the idea is supposed to be original, but that its author has not been found.

Working upon the assumption that a philosopher prefers theories which are consistent to theories which are self-contradictory, commonplace notions of truth have been taken as suggestions of theories, and an attempt has been made to develop in each case a consistent statement rather than to engage in lengthy discussions of textual interpretation. This may not be wholly justifiable. But surely the degeneration of purely theoretical essays into historical treatises is no more justifiable. No harm can be done so long as these men of straw are not incorporated in historical thinkers. The cavalier manner, moreover, in which Aristotle, Descartes, the "Mystics," the Stoics, have been mentioned, as if their works were open to no misunderstanding, must not deceive a possible reader. For this essay's concern with Aristotle, for instance, is only with a probable supporter of a specific theory of truth in which it is interested. He is mentioned merely for the sake of "scholarship."

BERKELEY, CALIFORNIA.

GEORGE BOAS.

Transmitted April 28, 1917.

CHARACTERISTICS OF A DESIRABLE THEORY OF TRUTH

Theories of truth differ from almost all other theories in that they form part of their own subject matter. A theory of thermodynamics is not a part of thermodynamics; a theory of the origin of species is not itself part of the origin of species; even a theory of ethics need not be considered morality; but a theory of truth which can not be tested by the criteria it establishes must perforce be at fault to that extent. Nor can the theorist hope for escape by way of a theory of types; even propositions of higher types are true or false, and each step higher leads but deeper into the tangle. So that whatever the definition of "truth" may be which is finally established, that definition must apply as rigorously to the truth of the definition as to the truth of any other proposition. In other words it must be self-critical.

Theories of truth, moreover, must satisfy three other conditions before they can be accepted. In the first place a theory of truth had best not presuppose any specific metaphysics, psychology, nor epistemology. In the interests of the search, it is true, many psychological and epistemological investigations may have to be carried on, but it is important that they be not taken for granted at the outset. Again, whatever theory may result will no doubt give rise to a very decided metaphysical system; but since that system must itself be a case of truth or falsity, it is wiser to let it be justified by a theory of truth than to let a theory of truth be justified by it. We must, however, presuppose ordinary logic—whatever ordinary logic may be—since after all a theory of truth must be reasoned and will be criticised willy-nilly by the laws of reasoning.

In the second place a theory of truth must account for the phenomenon of falsity. It is folly to define a false proposition as any proposition which is not true, since one logic at least,

Mr. Russell's, maintains that there is a third something which is meaningless. This contention must either be refuted or accepted, and if accepted, its warning that falsity is as positive or actual a property as truth must in turn receive full consideration.

In the third place, common sense demands that whatever the criterion of "truth," it must be of such a nature that one who understands the theory can apply it. If it is not applicable, it may be nicely reasoned, but it will hardly be worth while. Given the definition, we ought to be able to tell a true proposition from a false one. In fine the definition ought to be applicable. A definition which precludes its application must be rejected.

Given a theory which is self-critical, which is general, which is catholic, which is applicable, you have a fairly acceptable theory of truth.

SUBJECTIVE THEORIES OF TRUTH

(a) LOGICAL HEDONISM

A theory of truth is hedonistic when it identifies all true entities with pleasing entities, with comforting entities, with entities which we wish were "true." It is not a vague theory; it can be made as precise as geometry. And judging from the number of its followers, I should say it was the usual theory of truth. It has two aspects, one individualistic, the other collectivistic.

Ask a man why in the long run he believes anything and he will come back to this hedonistic theory. He will believe in a future life because a belief in a future life keeps him straight, and he wants to be kept straight. It is a comfort to him to know that he shall not lie in the dust. He could not live at all were it not for this belief in immortality. When asked why he could not live, he would say that it is because life would not be worth living. He would say that a belief in immortality is necessary for his well-being. In other words his happiness demands it. It is true because of the emotional thrill it gives him.

The notion of annihilation, on the other hand, is essentially false. It rubs the wrong way: it is opposed to all human desires and aspirations. All the values of life are negated by such a notion; it is too horrible to be true. Its falsity arises just from the extreme discomfort which the idea gives us; perhaps its falsity is this discomfort.

Very few people are willing to admit that they believe in those propositions which are pleasant and reject those which are unpleasant. They would no doubt consider this hedonistic theory extremely illogical. And yet it is of all theories one of the most logical.

In the first place it is self-critical. Its truth can be tested by its own rules. For in itself it is a very comforting and agreeable theory. And that would make it true.

The objection that all people would not find it comforting is not fatal. There is no need for all people to find it comforting. "If *p* is comforting, then *p* is true." Nothing is said about *p*'s being comforting to all minds. But perhaps this leads to contradiction. A may find *p* comforting and B may find it distressing. Can a proposition be both true and false? This seems on the face of it to be a serious contradiction; and yet it is not a contradiction at all. "A is pleased by *p*" by no means contradicts "B is displeased by *p*"; they are two utterly different propositions. But the theory is relativistic. To call it relativistic is surely not to damn it. *P* is true in one system of relation and may indeed be false in another; why should such a relativism be vicious? But the theory itself can have only relative truth. Even that may be admitted without harm. To say that a theory is only relatively true is merely to say that it is true because of the relation it sustains.¹ And the hedonistic theory is true as

¹ The distinction between the relative and the incomplete—the partial—has sometimes been overlooked. If one says that a proposition is "relatively" true one is apt to be criticized upon the ground that one maintains the proposition to be only partly true. But is there any reason to doubt that at least some—if not all—of an entity's properties are defined by the relations it sustains? In that case all that would be meant by such a relatively-defined property would be the fact that it is in the relation in question. But in that case one could scarcely say that the property only "partly" belonged to the entity. We distinguish pink from crimson, for example, by pointing out its lack of chromatic saturation and its large measure of "lightness." That is, it is a red which has a definite

long as there is a soul to find comfort in it. Only that theory could be absolutely true which was comforting to all possible souls or to an absolute soul. But until we take a completer census than is possible or until we discover the absolute soul we must be content with relative truth. And why not? Truth once determined is the same no matter how many souls experience it.

After such reflections it might be well to admit that the theory is self-critical. It is moreover sufficiently general. For not only does it not presuppose any specific metaphysics, epistemology, or psychology, but it does away with almost all logic and reasoning. Indeed its economy in this respect is terrifying. If the pleasure a proposition arouses in one is indicative (or constitutive) of its truth, obviously there is little need of reasoning. Why gather premises and draw conclusions? Why not simply feel? Thus the experiments of the laboratory and the researches of the analyst are all rendered superfluous.

That the theory is catholic has been shown above. Falsity is simply the discomfort which the experiencing of any proposition causes. And a proposition to which one is indifferent is meaningless.

But when we come to intelligibility, we find the theory breaking down. Given a proposition, "Caesar crossed the Rubicon in 1493 A.D.," I am to determine its truth or falsity. Contemplate

place in the series of reds. But two of its properties, mentioned above, are defined by its place in the series, by its relation to other reds. Consequently we may say it is relatively weak, relatively unsaturated. But that does not imply that once determined these properties are only "partly" there.

When this is applied to truth we find even the Absolutistic definition of truth relativistic. The Absolutist says that nothing is unified or whole except the Absolute. The fact that many concepts are defined through relations is used as a starting point. An entity is made up of properties; these are determined by relations; these relations imply other entities and other relations. In this way we pass, as on bridges, over the relations an entity sustains to other entities. Finally we reach the Whole, an entity whose relations are all within itself; it is a whole beyond which there is nothing. The whole is unified perhaps by an act of judgment. (Cf. Bosanquet, B., *Logic*, ed. 2, Oxford, Clarendon Press, 1911, vol. I, p. 31 and p. 71, on the unifying capacity of judgment.) Such a whole is perfectly intelligible, and if all knowledge were so unified and because of such unity "true," truth would, to repeat, be determined by relations, but it would not be "partial truth," i.e., either true of only a part of that whose property it is, or partly true of all of that whose property it is. (I assume that to be partly anything means the entity qualified has parts some of which are the property, or that the property has parts some of which qualify the entity.)

the proposition as I will, I get no reaction from it whatsoever. I am quite as cold as I am in the face of "Caesar crossed the Rubicon in 625 B.C." Apparently the two propositions are meaningless. But Caesar did cross the Rubicon sometime or other and even were I confronted with a proposition accurately symbolizing that fact, I should be neither pleased nor displeased; so that even such a proposition would be meaningless.

The hedonist would probably retort that such propositions would be meaningless—indifferent—only to me, whereas they might be full of meaning to someone else and hence could be true or false. Now if "true" is defined as "agreeable," the two terms ought to be equivalent. That is, wherever one is used, the other ought to be capable of being used. And it is soon discovered that much of the value of a theory of truth is the aid it gives you in discovering true propositions. It is of great interest to men to know the truth—why I shall not say. Can they know the truth when they know all agreeable propositions? This is to be sure a mere *argumentum ad hominem*. But it simply points out the difficulty of discovering the truth of propositions which one suspects are true—because of any theory you please—by the means afforded by the hedonistic theory. In short no matter how many times a man sails round the earth, he can never fully believe the proposition, "The earth is round," until he feels a certain elation in the idea.

An elation in the idea. But what is the idea? Is it the mere symbol, the words, the thought, or is it the idea "*that* the earth is round"? Does the proposition, "The earth is round" or the proposition, "The earth is round is true" please anyone? As soon as the hedonist admits that he is after all pleased by the *truth* of the proposition, then he abandons his former position. No longer is the pleasure derived from the experience of propositions constitutive of their truth: the truth of propositions is evocative of pleasure. But if this be the case, "true" is still undefined.

And it must be the case in the final analysis. When the proposition is looked at as a mere symbol, as so much sound or sight, as a pattern, whatever pleasure is derived from the

experiencing of that symbol is purely esthetic. Once you have admitted that the proposition really "stands for" something and it is of that something you are thinking when you are pleased, you have abandoned your hedonistic theory altogether and taken truth for granted. Clinging to your hedonistic theory—which now is an esthetic matter—you will find any abracadabra as sweetly tuned as a significant series of words. And in that case you are no longer talking about logic. You are not talking at all.

This criticism holds whether the logical hedonism be individualistic or collectivistic. There seems to be a belief current that a hundred mistakes create a truth. Consequently massed opinion counts for more than isolated opinion. This is of course no argument against the criticism urged above. Be the pleasure individual or social, if my reasoning is correct, the theory falls.

Many a hedonist again must meet this second difficulty. Although a proposition can be false in one system of relation and true in another, can it be true and false in the same one? If it can, all reasoning is vitiated, that is all reasoning that is based on the law of contradiction. In that case the reasoning which substantiates hedonism is partly vitiated. If it can not, the hedonist is falling back upon a principle of consistency. He is presupposing that all propositions implied by true propositions are true. Translated into hedonistic terms, this would read, "All propositions implied by pleasant propositions are pleasant." But this is in the first place not the case. And in the second place it is to abandon in part the cardinal principle of hedonism itself, namely, that one can recognize a true proposition by the affective coefficients of the experiencing of it.²

²I spend all this time upon what seems like an inherently trivial theory because of its close relation to an ethical theory which is regarded as something inherently profound. Hedonistic logic is considered rather childish, but Hedonistic ethics is considered most mature. It is stupid to assert that the pleasant is the true, but it is sagacious to assert that the pleasant is the good. And yet the very criticisms which apply to a hedonistic logic apply with equal force to a hedonistic ethics. One is no more intelligible than the other. Both secretly leave undefined the very objects of the definition.

(b) TRUTH AS THE IRRESISTIBLE

A second subjectivistic theory of truth finds the criterion of true propositions in the forcefulness with which they are known. Those propositions which can not be denied are true. Unlike logical hedonism, this theory has many historical manifestations. I intend to give a short account of these before criticizing the theory. It must however be remembered that the problem of truth as a self-conscious, as an explicit problem, has scarcely occupied the minds of thinkers until recent times.

The first thinkers to believe in truth as the irresistible were the Stoics and Epicureans. They both derive their epistemologies from Democritus. Shorn of its primitive psychological and physiceistic phrases, the epistemology of Democritus may be explained as a theory which posits a "mind" acted upon by "objects of knowledge." As far as I know such a passive rôle was generally assigned to the mind up to the time of Kant. It is a feature which may be looked upon as distinguishing the two most prominent attitudes towards the problem of knowledge. The function of the mind, then, is to receive, not to act (except in assenting to true propositions).³

What the mind receives is "impressions" from the world of knowable objects. When once the mind has been affected by these impressions, it is said to possess "ideas," "sensations," "percepts." Looking upon the matter without reference to the process, we find the mind in relation to entities, which relation constitutes knowledge. Adopting the terminology of Professor

³ V. Windelband, W.: *History of Philosophy*, tr. by Tufts, J. H., ed. 2, New York, The Macmillan Co., 1914, pp. 207-8. "*Judgment . . . is conceived of by the Stoics . . . by no means merely as the theoretical process of ideation and combination of ideas. They recognized, as the essential characteristic in judgment, the peculiar act of assent (συγκατάθεσις), of approval, and of being convinced, with which the mind makes the content of the idea its own, grasps it, and in a certain way takes possession of it (καταλαμβάνειν). This act of apprehension the Stoics regard as an independent function of consciousness (ἡγεμονικόν), in the same way as they regard the assent to the impulses, which makes its appearance in passion. The arising of ideas, like that of the excitations of feeling, is a process which is of natural necessity and completely independent of human will (ἀκούσιον) [my italics]; but the assent by which we make the one class, judgments, and the other, passions, is a decision (κρίσις) of consciousness, free (ἐκούσιον) from the outer world."*

The italicized portions indicate the receptive aspect of the theory.

Alexander, let us call the entities when outside of the knowledge-relation "sensibilia," and when within the knowledge-relation, "sensa."⁴

Obviously there might be an affective coefficient to the knowledge-relation. Sensa might be particularly brilliant, particularly impenetrable, particularly *intense*. It is taken for granted, according to this theory, that when the sensa are intense, the knowledge received is credible, but that when the sensa are dull, vague, scarcely felt, the knowledge is dubitable. Now knowledge which one can believe whole-heartedly—one must use emotional words in expounding this theory—is true, and knowledge which we can doubt is—not probably false—but false. In other words the truth is what you can not help believing in. And your incapacity springs from the vividness with which the true something impresses itself upon you.

There is some doubt as to whether the Epicureans or the Stoics or both held this doctrine.⁵ It makes very little difference

⁴ "Perceptibilia" and "percepta" would do just as well for our purposes, though not for Professor Alexander's.

⁵ See Hicks, R. D., "Stoics," *Encyclopedia Britannica*, ed. 11, p. 946b, for a discussion of the meaning of *καταληπτική φαντασία*.

"Formerly this technical phrase was explained to mean 'the perception which irresistibly compels the subject to assent to it as true.' But this, though apparently supported by Sextus Empiricus (*Adv. Math.* vii, p. 257), is quite erroneous; for the presentation is called *καταληπτόν*, as well as *καταληπτική*, so that beyond all doubt it is something which the percipient subject grasps, and not that which 'lays hold of' the percipient. Nor, again, is it wholly satisfactory to explain *καταληπτική* as virtually passive, 'apprehensible,' like its opposite, *ἀκατάληπτος*, for we find *ἀντιληπτική τῶν ὑποκειμένων* used as an alternative phrase. It would seem that the perception intended to constitute the standard of truth is one which, by producing a mental counterpart of a really existent external thing, enables the percipient, in the very act of sense, to 'lay hold of' or apprehend an object in virtue of the presentation or sense impression of it excited in his own mind."

Zeller seems to disagree with this interpretation. "If the question is raised, How are true perceptions distinguished from false ones? the immediate reply given by the Stoics is, that a true perception is one which represents a real object as it really is. You are no further with this answer, and the question has again to be asked, How may it be known that a perception faithfully represents a reality? The Stoics can only reply by pointing to a relative, but not to an absolute, test—the degree of strength with which certain perceptions force themselves on our notice. . . . Some of our perceptions are . . . of such a kind that they at once oblige us to bestow on them assent, compelling us not only to regard them as probable, but also as true and corresponding with the actual nature of things. Such perceptions . . . are . . . termed conceptional perceptions. Whenever a perception forces itself upon us in this irresistible form, we are no longer dealing with a fiction of the imagina-

to our discussion whether it was ever held. It is a plausible doctrine and for that reason alone must be considered. Examples of what is meant by irresistible knowledge can be found in the experiences of everyday life in what is usually called sense-knowledge." When you open your eyes before the blinding sun, you are supposed to be in possession of indubitable and inevitable knowledge, knowledge which is inevitable simply because of the power and intensity with which its objects affect—and now we may use the word metaphorically—the mind.

The relations of this doctrine to other doctrines are particularly interesting. We find Descartes, for instance, positing a similar criterion for what he will believe in. No matter what he held to be the objects of knowledge—and it must be remembered that the distinctions between "things," "ideas," "judgments," "propositions," were not rigidly defined until recently—he refused to assent to anything but what was "clear and distinct." Whenever an idea stands before one in perfect brilliance—such as the idea of self-identity—one can not doubt it. "I can not but believe that I who doubt exist." "I have a clear notion of the existence of God." Such propositions being so luminous are inevitable again. They carry their own proof with them. They are self-evident. They shriek at you and will not be downed. Put in these words, the connection with Epicureanism is easily seen. Descartes probably did not mean that the idea of God's existence came winging its way to the mind, like a Democritean eidolon. Quite the contrary, it was born into the world with the mind which it possesses. But just as the Democritean eidolon fixes itself upon the knowing soul until it can not be denied, so the Cartesian true idea compels the mind to give assent.⁶

tion, but with something real. . . . Or, expressing the same idea in the language of Stoicism, conceptional or irresistible perceptions *φαντασται καταληπτικαί* are the standards of truth, etc." Zeller: *Stoics, Epicureans, and Sceptics*, tr. by O. J. Reichel, London, Longmans, 1880, p. 88.

For the literature on this subject see Pearson: *Fragments of Zeno and Cleanthes*, London, C. J. Clay & Sons, 1891, pp. 62–63, where the fragment itself is given in which the phrases occur.

⁶ It would be obviously absurd to attribute these thoughts to Descartes. Yet wherever he gives us evidence that he is a "rationalist," he also gives us equally good evidence that he is a "sensationalist." The truth is that he is one of the few epistemologists with two types of knowledge,

Like the Cartesian criterion is the criterion of modern sensationalism which in turn would reduce the mind's stock of true knowledge to a stock of knowledge derived from sense-experience or from the immediately given.⁷ The only reason why the sensationalist reduces knowledge to sense-experience is that he believes in the indubitability of sense-experience. In his dogma, a dogma in which Descartes of course would find little that was sympathetic, the senses can not lie. And since they can not lie, we ought to be able to find in them the seeds of all true knowledge. For, assuming that what is implied by a true proposition is true, the initiation of a system of thought by sense-experience would be the most adequate means of securing a system of true propositions. The reason why sense-knowledge is indubitable is seldom stated. It is apparently axiomatic with the sensationalistic school.

To avoid a peculiar psychology, epistemologists have often substituted for sense-knowledge the "immediately given."

one "sensory," one "conceptual," who seem to cling to their distinction. The goodness of God is his assurance that "external things" exist (*Meditation VI*, *Œuvres*, ed. by V. Cousin, Paris, Levrault, 1824, p. 334). But the knowledge of external things comes through "the senses," and Descartes admits (*op. cit.*, p. 327) that sometimes sensory ideas are "*plus vives, plus expresses, et même à leur façon plus distinctes qu'aucunes de celles que je pouvois feindre de moi-même en méditant. . . .*" There is however that other type of knowledge—not mediate, it must be remembered—but inborn. That the knowledge of God, from which all other knowledge gains value, is of the latter type, is what might incline us to the opinion that Descartes is not a "sensationalist." But it must be remembered that for him the "cause" of our ideas was in itself a problem, and whether he identifies that cause with "external objects" or with God, he is one with the Democriteans. "*De plus,*" he says (*op. cit.*, p. 333), "*je ne puis douter qu'il n'y ait en moi une certaine faculté passive de sentir, c'est-à-dire de recevoir et de connoître les idées des choses sensibles . . .*" and thus seems to be a receptivist. But he finishes his sentence by remarking, "*mais elle me seroit inutile, et je ne nien pourrois aucunement servir s'il n'y avoit aussi en moi, ou en quelque autre chose, une autre faculté active, capable de former et produire ces idées.*" Thus he posits a sort of "intelligizing" mind.

It is because of Descartes' doctrine of "clear and distinct" ideas—a phrase of no uncertain "passive" connotation—and because of passages similar to those quoted above, that we have compared him with the Stoics.

⁷ One of the best examples of this is seen in William James: *The Function of Cognition*, p. 39, reprinted in *The Meaning of Truth*, New York, Longmans, 1914. "These percepts, these *termini*, these sensible things, these mere matters-of-acquaintance, are the only realities we ever directly know, and the whole history of our thought is the history of our substitution of one of them for another, and the reduction of the substitute to the status of a conceptual sign. Contemned though they be by some thinkers, these sensations are the mother-earth, the anchorage, the stable rock, the first and last limits, the *terminus a quo* and the *terminus ad quem* of the mind. To find such sensational *termini* should be our aim with

Instead of finding a criterion for truth in sensations, the immediatists find it in whatever the primitive data of knowledge (or experience) are. To call them "sensations" would be inelegant; they may turn out to be anything else the psychologist finds them to be. The immediatist simply presupposes a mind and objects, some of which are "known directly," without the mediation of "ideas" which copy them. And whatever it is that is known directly gives rise to or partly constitutes true knowledge. Again this must be an axiom, for there seems to be no reason why the elements of knowledge should be any truer than the less primitive features. There, however, the matter rests. You have an idea, you have knowledge, you can not doubt it because nothing stands between you and what you know. Something must be true. Why not the indubitable? But to have removed a sensation and substituted an "immediately given" is not to have changed the logic of the situation. We are not yet interested in knowing *what* is true, but *why* what is true is true. And the immediatist answers

all our higher thought. They end discussion; they destroy the false conceit of knowledge; and without them we are all at sea with each other's meaning. If two men act alike on a precept, they believe themselves to feel alike about it; if not, they may suspect they know it in differing ways. We can never be sure we understand each other till we are able to bring the matter to this test. This is why metaphysical discussions are so much like fighting with the air; they have no practical issue of a sensational kind. 'Scientific' theories, on the other hand, always terminate in definite percepts. You can deduce a possible sensation from your theory and, taking me into your laboratory, prove that your theory is true of my world by giving me the sensation then and there. . . ."

This needs no comment. What sensation would a scientist give a man in proof of the atomic theory?

A more classic example of the reduction of the "higher processes" to sensation may be found in the second section of Hume's *Enquiry* "upon the origin of ideas." He begins, it will be remembered, by differentiating our cognitive life into two parts, first, present "experience," second, remembered "experience," parts which differ only in their property of forcefulness, "vigor." "The most lively thought is still inferior to the feeblest sensation," he says (paragraph 1), and names his two classes "thoughts" and "impressions." He then proves that all thoughts can be analyzed into elementary sensations and that the absence of a sense organ determines the absence of appropriate ideation (paragraphs 6 and 7). And finally he says—as James does—"When we entertain, therefore, any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire, *from what impression is that supposed idea derived?* And if it be impossible to assign any, this will serve to confirm our suspicion. *By bringing our ideas into so clear a light* [my italics] we may reasonably hope to remove all dispute, which may arise, concerning their nature and reality." (Paragraph 9.)

with the sensationalist, with Descartes, with the Epicurean, an entity is true because you can not help believing it.⁸

When you abandon psychology, when you speak of the immediately-given as the true, you are not very far from mysticism. The mystic justifies his knowledge of the One by adducing its intensity, its self-luminosity. He knows that he is face to face with God because he is completely immersed and lost in the experience.⁹ This highest knowledge has seized him by force and poured forth its radiance upon him. "If you doubt," he cries, "it is because you have never had the vision. Once possessed by it you can not doubt the message which it brings." A better case of the *φαντασία καταληπτική* of the Stoics, whether you interpret it as an irresistible idea or as an idea which grasps reality and so illumines the mind, could scarcely be found. I have knowledge of God because I can not doubt it. The idea fills my whole being with its truth.¹⁰ There is little difference after all between the Ecstatic Vision and the Ecstatic Sensation.

This brief and perhaps too cursory sketch of the theory's history must suffice. There are only a few specific criticisms to be directed at it before applying our criteria for a satisfactory theory of truth. In the first place there stands prominent the assumption that what is true must be identical with the elementary facts of knowledge. In other words, the criterion for truth is identified with what is epistemologically simple. If

⁸ The question whether "truth" must be compounded of "true elements" will concern us later. But there is no principle of synthesis which insists that the properties of elements must be properties of complexes which those elements form. The best example of this is the trite example furnished by chemistry.

⁹ Compare the mystic fusion of mind and object in the Ecstatic Vision with on the one hand the reduction of the mind to a complex of objects (American new realism, especially Holt, E. B.: *The Concept of Consciousness*, New York, Macmillan Co., 1914), and on the other of the objects to a complex of mind-entities, ideas (Subjectivism). The motive in both cases seems to be the same. Knowledge must in the long run be unmediated. Hence all barriers between knower and known must be removed. It is inevitable that an identity be established, if not in so many words, at least in effect.

¹⁰ These are the commonplaces of criticisms of mysticism. References to sources seem almost unnecessary. To see them reinforced by numerous citations of the mystics themselves, one should turn to Lectures XVI and XVII of James's *Varieties of Religious Experience*, New York, Longmans, 1903, especially the quotations from Saint Teresa (pp. 408-412), the footnote on Boehme (p. 410, n. 2), and the quotation from Plotinus (p. 420).

irresistibility is the criterion then knowledge must be analyzed into elements which in turn are irresistible. If knowledge, to reverse the process, is a complex of sensations, then sensations must be true. One's growth in knowledge seems to be a development out of truth to increasing falsity. Such logical pessimism may be justifiable, but it should not be assumed at the outset. There is a link, we all feel, between what we know and the truth of what we know, but if truth is a criticism in any sense of what we know, there is no reason to assume that we start with the truth. We are all according to one man's notion perhaps striving for "the truth." It is rather strange to suppose that the struggle springs from the truth itself. It seems to be like supposing that moral values are unsubstantiated unless the primitive moral act—whatever its specific character—is itself the good. Accordingly the building up of knowledge from elements intrinsically true need be granted no more obeisance than any other procedure. There is quite as much reason to assume that ultimately simple knowledge is either always false or both true and false and becomes true as it grows complex or as it fills certain needs and so on.

A similar confusion—perhaps the same in the long run—grows out of the attempt to make a psychogenetic account of knowledge reproduce the construction of a logical synthesis. Not only must the ultimate simples of epistemology be true, but they must be identical with the ultimate simples of logic.¹¹ For instance, a proposition can be analyzed logically into terms in relation. Accordingly knowledge is supposed to grow out of a knowledge of terms, now related among themselves, now related by the subject. We find on this basis the old dichotomy of "knowledge-of" and "knowledge-about," and the latter grows out of, or is composed of the former. It is the relationship which perceptual knowledge is said to bear to conceptual knowledge, immediate to mediate, *kennen* to *wissen*, and so forth. Apart from the emotional differentiae of these two sorts of knowledge, they seem

¹¹ Cf. Aristotle's *Metaphysics* (tr. by W. O. Ross, Oxford, 1908), Bk. IX (Θ), ch. 10, 1041b, where he deals with the truth and falsity of "incomposites," pointing out that one can be in ignorance of them but not in error, and that one has the truth about these entities simply by "thinking" them.

to be related as the psychologists say perceptions are related to sensations. As soon as you get a sufficient number of sensations, you have a perception. What mysterious alchemy turns the leaden sensation into the golden perception is never revealed. It seems to be constituted by the mere charm of numbers.¹²

When knowledge-about is reduced to knowledge-of, you find a certain cognitive quality to the sting of sensation. Sensations are no longer mere "modifications of the soul," "modes of consciousness," they are attached to things: they are no longer sensations, *they are sensations-of*. Accordingly the knowledge that the sun is shining is identical with that seemingly other entity, the sensation of peculiarly radiant brightness. When you receive—or have—a specific intense visual sensation, you have knowledge-of the sun. Now as a matter of fact one might stare at the sun until blindness set in and never be able to formulate the proposition, "The sun is shining." One might have any

¹² The Stoics seemed to appreciate this fact. "Absolute certainty of conviction they allow only to knowledge, and therefore declared that the truth of perceptions of the senses depends on their relation to thought. Truth and error not belonging to disconnected notions, but to notions combined in the form of a judgment, and a judgment being produced by an effort of thought, *it follows that sensations, taken alone, are the source of no knowledge*, knowledge first arising when the activity of the understanding is allied to sensation." Zeller: *Stoics, Epicureans, and Sceptics*, tr. by O. J. Reichel, London, Longmans, 1880, p. 83.

Cf. Windelband, *History of Philosophy*, tr. by J. H. Tufts, ed. 2, New York, Macmillan, 1914, p. 207.

"Although, therefore, the whole material of knowledge was held to grow out of sensuous presentations, the Stoics pointed out, on the other hand, that in perception as such, no knowledge whatever is contained; that it is not to be characterized as either true or false."

But see James: *Psychology, Briefer Course*, New York, Holt, 1900, for the classic confusion between sensations, perceptions, acquaintance and knowledge about. This confusion must not, however, be attributed to Bertrand Russell, who says, "Acquaintance, which is what we derive from sense, does not, theoretically at least, imply even the smallest 'knowledge about,' i.e., it does not imply knowledge of any proposition concerning the object with which we are acquainted. It is a mistake to speak as if acquaintance has degrees: there is merely acquaintance. . . . Thus it is a mistake to say that if we were perfectly acquainted with an object we should know all about it. 'Knowledge about' is knowledge of propositions, which is not involved necessarily in acquaintance with the constituents of the propositions. To know that two shades of color are different is knowledge about them; hence acquaintance with the two shades does not in any way necessitate the knowledge that they are different." (*Scientific Method in Philosophy*, Chicago and London, Open Court, 1914, p. 144-145.)

It is still of course a question whether two entities so different in character ought to be called by the same name, "knowledge." What

number of similar experiences and be in utter ignorance. To formulate the proposition above requires, already possessed, at least sufficient knowledge to classify; and not only that, it requires memory and recall. The only possible proposition—or judgment, if you will—which could be legitimately made from the experience of any sensible, is the judgment, “I am having an experience,” or more accurately, “Something is happening.” To infer what it is, is impossible.

It will be seen from these two preliminary criticisms that there may be ultimately simple *sensa*; and that these *sensa* may become true or false because of their immediacy or inevitability or whatever affective process you will: but the truth of ultimately simple propositions must be determined without respect to their truth. For the two events are ineradicably different. Whatever the relation of the terms in a proposition to a subject, the fact that the whole proposition is so related and that it has the

common property is there to “acquaintance” and “knowledge-about” that warrants their common name “knowledge”? The feeling that “knowledge about” is “knowledge of” propositions is of course justifiable. It must be tuned up with Mr. Russell’s inventory of the objects of acquaintance (*Problems of Philosophy*, New York and London, Holt, n.d., p. 73 ff.) and with the following quotation from *Scientific Method in Philosophy*: “Whether an atomic proposition, such as ‘this is red,’ or ‘this is before that,’ is to be asserted or denied can only be known empirically. Perhaps one atomic fact may sometimes be capable of being inferred from another, though this seems very doubtful; but in any case it cannot be inferred from premises no one of which is an atomic fact. It follows that, if atomic facts are to be known at all, some at least must be known without inference. *The atomic facts which we come to know in this way are the facts of sense-perception; at any rate, the facts of sense-perception are those which we most obviously and certainly come to know in this way.*” (My italics, p. 53.)

For a typical “structuralistic” account of the genetic relation between sensation and perception see Titchener, E. B.: *A Text-Book of Psychology*, New York, Macmillan, 1913, p. 364. “The simplest kind of perception . . . —what we may call the pure perception—implies the grouping of sensations under the laws of attention. But it is clear that perceptions are, as a rule, not made up solely of sensations; we see and hear and feel more than is presented to eye and ear and skin; the given sensations are supplemented by images. Most of our perceptions are mixed perceptions, complexes of sensory and imaginal elements; and the life of perception is, far more than one is apt to suppose, a life of imagination.” If we think of attention as an active “Kantian” factor, we are quickly checked by an earlier passage in the *Text-Book*, p. 267, “In the last resort, and in its simplest terms, attention is identical with sensory clearness.”

Angell, however, seems to be aware of the problem, but his “experience,” “operating upon our sensory excitations at the very outset of life,” (Angell, J. R.: *Psychology*, ed. 4, New York, Holt, n.d., p. 157) seems a mystification rather than a clarification.

properties of its terms, cannot be inferred from it. I am not denying as yet that some propositions are not immediately given, are not clear and distinct, are not irresistible; I am simply asserting that the truth of even those propositions is by no means the truth of their terms.¹³ Were this false, it might be a safe generalization that the properties of terms became the properties of relational complexes constituted in part by those terms. Whereupon we could infer that since 2 is the second integer, $2 + 2$ is also the second integer: or that because A has a sister, he is female. Let this statement contradict the *dictum de omni* if necessary; there is always one property of a whole which none of its parts possesses, and that is the property of being a whole composed of those specific parts.¹⁴

To overcome this difficulty, radical empiricism presupposes knowledge-of terms-in-relation.

"Radical empiricism," said James, "consists first of a postulate, next of a statement of fact, and finally of a generalized conclusion. . . .

"The statement of fact is that the relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves.

"The generalized conclusion is that therefore the parts of experience hold together from next to next by relations that are themselves part of experience. The directly apprehended universe needs, in short, no extraneous trans-empirical connective support, but possesses in its own right a concatenated or continuous structure."¹⁵

This "statement of fact" may be perfectly true and yet the difficulty is not met. (Although James is not here to be sure attempting to meet the special difficulty we are considering.) The position advanced is that when I assert an immediately given truth, I know "directly" the terms in relation which are symbolized by the true proposition in question. But the refuge is not sufficiently protective. The confusion of the psychogenetic with the logical is as destructive as ever. For what new element is introduced into knowledge-of complexes which was not present in knowledge-of terms; what new element that can

¹³ We are assuming here that terms can be significantly called "true."

¹⁴ The reference to the *dictum* must not be taken too seriously. "*Omni*" is no doubt to be interpreted distributively not collectively.

¹⁵ *The Meaning of Truth*, New York, Longmans, 1914, pp. xii, xiii.

transsubstantiate knowledge-of complexes into knowledge-about complexes? You may say from dawn to dewy eve that you "know-the-book-on-the-table," or "the-red-rose" and you will not be able to infer that the book is on the table or that the rose is red. The most important symbol, the one symbol which always indicates knowledge-about is lacking, the symbol "that." And it is "that" which is the differentia of cognition from other experiences, which imparts "meaning" to what is known. We state this here dogmatically. Later we hope to discuss it in more detail. Now if knowledge-of is supposed to give you this element, too, is supposed to present meanings to a subject, then it is in no way different from knowledge-about. Sense-words, as everyone knows, are used as often to indicate knowledge-about as knowledge-of. "I see that the book is on the table" is no more knowledge-of than "I know that the book is on the table." But this ambiguity need not lead to more serious ambiguities. If one touches that the wall is hard, for instance, one has gone over from immediate to mediate knowledge, from perceptual to conceptual knowledge. And the analysis which mirrored epistemologically the logical analysis has been abandoned.

In fine, then, it is useless to try to build up knowledge from elements which are not cognitive. It would be like logically analyzing water into transparency, wetness, fluidity, tastelessness, colorlessness, etc., and telling a chemist to produce transparent, wet, fluid, tasteless, colorless water out of the elements. The reduction of knowledge getting to the exemplification of the process of analyzing propositions is like the assertion that since we learn long words syllable by syllable, so the meaning of words must be traced to the meaning of the syllables. Which will do very well for "telegram," but won't do at all for "character."

All this criticism can not apply to all thinkers who have found the criterion of truth in the effect of true propositions upon a receptive mind. The process of criticism has been largely an interpretation of selected epistemologies in the light of their implicit theories of truth. Whereas I shall now make certain generalizations about these theories, I shall not expect them to fit the individual epistemologies of such thinkers or schools of

thought as I have mentioned by name. I take it then for granted that the particular vices or the theories we have here discussed are:

(1) An identification of the logically prior with the genetically prior;

(2) An identification of the elements of propositions with the ultimate simples of cognitive experience;

(3) An identification of the criterion of truth with the ultimate simples of cognitive experience.

In opposition to these dogmas, this paper holds:

(1) That the genetic series may be either from simple to complex or from complex to simple;

(2) That there is a point at which a further analysis of cognition breaks it down into entities which are no longer cognitive in character and hence valueless for an understanding of cognition;

(3) That the ultimate simples of cognition may be either true or false or both indeterminately.

Having now criticized our theory in general, let us test it by the four criteria of a satisfactory theory of truth laid down in our first chapter.

To begin, the theory is not self-critical. For if there were no better test of the lack of resistibility, clearness, indubitability, our long and perhaps tedious efforts to rationalize it would suffice. But is it as a whole supposed to be irresistible, or are the postulates alone so characterized? In itself, one might say, in its totality as a system, the theory is indeed too complex to be irresistible, but it can be analyzed into a set of primitive ideas and propositions which considered individually are indubitable.

Let us isolate the system from its postulates. Let us examine them, whatever they may be, and discover in them, if possible, an irresistible something which marks them as true.

In the first place one wonders where this something is to be found. Just what is it about these propositions which is held to be clear and distinct, irresistible, immediately given? One can not, of course, enumerate all the properties of propositions in this search; one must confine one's self to a few.

Perhaps it is the meaning of the proposition which possesses the desirable characteristic. Perhaps those propositions which are immediately grasped, whose meaning is clear and distinct, and hence indubitable, are true. But is the meaning of a proposition ever immediately grasped, or is it not reached, as are all other meanings, only after a long process of interpretation? As Professor Royce points out, the mere perception of a sign would never give you its meaning.¹⁶ As soon as the interpretation is completed, if it is ever completed, the meaning is seen at a flash. But is that a peculiarity of true propositions? Are not false propositions as easily understood as true ones? As far as meaning goes, "Caesar was the fourth President of the United States" is as intelligible as "Madison was the fourth President of the United States." And when the proposition is interpreted, it is just as hard to avoid "seeing" what it means.

But of course epistemologists of the past, Descartes, for instance, had no intention of limiting the range of "truth" to propositions. Like many another epistemologist, he spoke of true "ideas." The clarifying of the issue is really a contemporary matter. And even today we have reached no startlingly illuminating doctrine. Accordingly it was easy for Descartes to say that "ideas" are "true" when they are clear and distinct. But what he means by "idea," and what aspect of the "idea" he finds clear and distinct, it is not easy to tell. "I have a clear and distinct idea of God; therefore God exists." But does this mean that one can define "God" in unmistakable terms; does it mean that one has a feeling of God's presence; does it mean that one has had immediate knowledge of God, that one was born with an "idea" of God—in other words that one has never doubted His existence? If it is just a question of the concept's meaning, obviously the same thing would hold true of all intelligible concepts as of all intelligible propositions, namely that they all have a meaning and that when they are interpreted, their meaning is irresistible, is clear and distinct, is indubitable.

It is no doubt unfair to reason in this way about problems which never occurred to the men whom one is criticizing. But

¹⁶ *The Problem of Christianity*, New York, Macmillan, 1913, vol. II, pp. 286 ff.

what is said here is said about the theory not so much as it was incompletely formulated historically, but as it might be formulated if rounded out into a genuine system of theoretical import, with presuppositions and implications well set forth. And to achieve this end one would most assuredly have to face the issue, "What in the true entity is immediately given; what can't I doubt?" And one is forced almost against one's will into a discussion upon the nature of propositions, meanings, judgments, ideas. If one avoids defining such ambiguous terms and uses them as fundamentals in one's theory of truth, obviously it is in the interest of science to point out their ambiguity.

If it is not the meaning of the proposition which can not be doubted—can not, note, often for purely psychological reasons¹⁷—one begins to suspect that it is the truth of the proposition which can not be doubted. In sense-experience, for instance, what is irresistible is "that I am having such and such an experience"; in the mystic vision, "that I am face to face with God." But if this be the case, it is easily seen that the criterion of truth has in no way been found. The search has simply been delayed. This or that proposition is true because its truth is immediately given. Whether truth is ever immediately given is a question, but a question beside the point. The point is that one asks when a proposition is true and is told, "when it is true." One is told that a proposition is true when it is indubitable, etc., and when one asks what is indubitable, one is told—its truth.

A guess might be hazarded that this theory fails where many a theory of ethics fails, in trying to derive standards from elements which have no normative character. Whatever the nature of truth, it is in some sense of the word a standard used to criticize all propositions.¹⁸ One need not pretend to have found

¹⁷ This "can not" must be differentiated from the "cannot" of the post-Kantian idealists (Fichte, for example), the English Hegelians with their "inconceivable," and Royce with his "reflective method." The "can not" of the irresistibility-theory is due to human limitations, is a purely psychological affair. The "can not" of Fichte, Joachim, say, and Royce is a logical matter. Those propositions must be accepted whose denial can not be accepted—because it would involve a contradiction.

¹⁸ Truth as a "value," cognate with "goodness" and "beauty," is, as everyone knows, an old story. It often seems, however, as if its age implied its decay. And yet there is still a good deal to be said for treat-

a method for defining value-terms when one asserts that a certain method is faulty. Nor do we here pretend to have found a definition for truth when we say that a definition can not be transmuted from materials which have none of the potentialities of truth. To have defined the truth as "what we accept as the truth" is analogous to defining the good as "what we accept as the good." In both cases the issue is deferred, and the issue is the discovery of those reasons—if reasons there be—why we accept this as the truth and why we accept this as the good. One can easily make a catalog of true propositions in the way suggested. But this catalog will only be valuable in so far as it throws light on what sort of propositions are accepted and what differentiates them from other propositions. If knowledge proceeds in any way by analysis, a mere collection of data, related but not rationalized, is hardly an intelligible contribution to progress. When one seeks a definition, it is, to be sure, valuable to have already isolated the materials to be defined. But to have merely isolated them is not to have defined them except dumbly and inarticulately. To have isolated them and known why and on what principle the selection was made is of course to have completed the work.

The first criterion, we may safely say, has not been satisfied. The theory is not self-critical. Is it now sufficiently general, or is it based upon a specific epistemology or psychology with which it stands or falls?

To answer this question is especially difficult. For in so far as our theory is one theory, it has been a construct of the views of many thinkers who agreed, often unconsciously, and mainly in their attitudes towards truth alone. This may be proof enough

ing truth as a value. Certainly it plays a part in our lives somewhat analogous to the parts played by goodness and beauty. It is a spur to action, it is "a" value, one of the many valuable matters we seek. But note moreover such terms as "genuine," "actual," "real," etc., all of which are used over and over again to define the true. "That proposition is true to which there corresponds a *genuine* fact." "When we have discovered what *really* exists, we have discovered the truth." These are the barest examples.

It may be that this normative aspect of truth is its most characteristic aspect. It may be that in it one could find the criterion of which all men are in search. Certainly the pragmatists think so—and so do the Fichtean.

that no one specific epistemology or psychology is presupposed. But when one sees the variety of similar epistemologies, one is less hopeful.

The Stoic, for instance, differed in ethics from Descartes, in religion from John Locke, in metaphysics from Jacob Boehme. As far as the minor facts of epistemology go there were almost as wide divergences. There are the discussions about the knowledge of "universals," about "innate ideas," about "qualities" and the like. But at the base of all the talk lies a common agreement, a nucleus of funded opinion held collectively, namely, the three presuppositions stated and criticized above (p. 206). And besides this is the presupposition that the subject "receives" knowledge, which accordingly, whether "representative" or not, may be called "affective." Without an affective theory of knowledge, it is difficult to see how one would be likely to believe in the truth as the "irresistible" or the "immediately given" or the "clear and distinct." The very names connote an air of receptivity, a mind waiting for knowledge and acted upon by it.

Without going into details, so much may be granted. But if it be granted it must at once be seen how very specific the epistemology is. If Kant taught philosophy nothing else, he taught it the spontaneous nature of knowledge, he taught it that knowledge may be considered to be not a reception but an act. Whatever the nature of the act, and of course it has many possible natures, the attitude indicated towards the epistemological problem is utterly different from that of the affectivists. It is an attitude which would lead men to say, as Kant did say, that the mind changes the world in which it finds itself by knowing it; it is to lead men to say that the mind creates the world it knows by knowing it; it leads men to derive metaphysics from epistemology, an affair which no "affectivist" would dream of. So diverse are these two points of view that to attempt to unite them were indeed foolhardy. One, it is true, may be no sounder than the other. But both are possible and hence neither is utterly fundamental. And if it can be proved that the theory of truth which is the consideration of this chapter holds good only because of an affective theory, that it does not conform with

a spontaneous—or “functional”—theory, then it may at least be suspected of too great specificity.¹⁹

Now that is just what seems to happen. Although it would be out of place here, if not impossible, to state every functional theory of knowledge and compare it with our present theory of truth, it is possible to generalize these theories and thus make the comparison. An activist theory presupposes a mind determinate in character to this extent, namely, that it is capable of affecting possible objects of knowledge, “reality,” the “external world,” or what you will. The mind may be a Christian soul, or a mere mathematical “something”; it is always an agent. Since knowledge is active in nature, since the mind “does something to the world” when it knows it, it is obvious that to speak of the irresistibility of knowledge, is almost meaningless. For there is nothing to resist. The world is given not to a receiver but to an agent. The subject does not take a world, it makes a world. There is no immediately presented. There is only an immediately created. And if it is significant to speak of true and false knowledge, truth and falsity are properties—using the word very loosely²⁰—not so much of the experiencing of objects as of the production of objects. And speaking very generally, indeed, knowledge never *is* but *becomes* true.

These points perhaps prove nothing. They are intended to indicate the one fact that truth as the irresistible is after all not only connected with a specific epistemology but based upon it. Sacrifice an affective theory of knowledge and this criterion of truth is well-nigh meaningless. On this account, we maintain that it is not sufficiently general.

Is it catholic: does it account for false and meaningless propositions?

As countless theorists have pointed out, truth and falsity are incompatible properties. That is, in any given system of relation,

¹⁹ A functional theory of knowledge must not in any sense of the word be confused with a functional psychology. (See Angell: “The Province of Functional Psychology,” *Psychological Review*, March, 1907, vol. XIV, pp. 61 ff.)

²⁰ So loosely in fact that a relation sustained by an entity may here for our purposes be considered a “property” or the characteristic of a relation itself.

no proposition can be both true and false. Obviously it is preferable, if not necessary, to find a criterion which has an antithesis, an entity which will in form be a criterion of falsity. This need not involve a question of "degrees" of truth. That is a question for the application of logic rather than for the purely formal side of the matter—if there be one. As far as we know, propositions are related to other propositions in one to one correspondence such that if one be "true" the other will be "false."²¹

Is the criterion of irresistibility antithetical to another entity, say resistibility? Is clarity antithetical to obscurity? Is immediacy antithetical to mediacy? If so the adjectives ought not to have comparatives; the concepts "more" and "less" ought to be meaningless when applied to them. But we find that there are degrees of resistibility and of clarity. And no doubt there are degrees of mediacy. If this be so, then, although we can tell when propositions are true, for there is no quantitative aspect to the irresistible or the immediate, or possibly to the clear, we can not tell when propositions are false. In other words a proposition may be completely true; it can never be completely false, a position only in part satisfactory to those who believe in "degrees" of truth. Combine this criticism with that suggested above, namely that fact shows us the irresistibility of some aspects of false propositions—and there was no way found to point out what aspect of propositions was to be irresistible—and the theory seems to a considerable extent failing to account for falsity.

Finally can the theory be applied? Does it furnish any means of empirically testing our knowledge for its truth and falsity? We need take no account of its relativistic character. That matter has been amply discussed in our criticism of logical hedonism. It can in no way be made to tell against a theory.

²¹ Cf. G. E. Moore, "Truth" (*Baldwin's Dictionary*), for something approximating the naive view. "'True' and 'false,'" he says, "as applied to propositions, denote properties attaching to propositions which are related to one another in such a way that every property must be either true or false, and that to every true proposition there corresponds a false one, and to every false proposition, a true one, differing from it only as being its negation."

The real trouble is that the concepts of immediacy and clarity and irresistibility are so ill defined. As we have already said there is no way of telling *what* they apply to. Besides that, they need criteria of their own. When can one resist an idea and when can one not? When is an idea clear and when is it obscure? Do we want to find this criterion which will answer our question in a further logical analysis of the disputed concepts, or in an historical ontogenetic account of the attaining of knowledge?

When this question is put the whole struggle between "pure logic" and "psychologism" comes to birth. Is it possible and valuable to treat knowledge abstractly as a subject matter to which time is irrelevant or must we treat it genetically, historically? When this question is answered, most of our disputes will be concomitantly answered. The validity of analysis and abstraction are all bound up in it. Most people will admit that in affairs which have no temporal character, abstraction and analysis are fair enough tools, but a great many of them feel that in affairs which "happen," in which time "makes a difference," they are vicious, indeed falsifying terms.

We can not attempt to settle the argument here. We must simply take a position, make it clear, and leave it to others as a weapon.

Let us assert that we stand against the "psychologizers" for the following reasons:

(1) That to talk at all involves an act of abstraction, inasmuch as we can not grasp the whole content of our opinions in any set of symbols. To do so would be to duplicate the content.

(2) That discussion is a utilitarian matter aiming at a greater understanding of its content, whatever "understanding" may be.

(3) That whatever achieves this end is in so far forth justified.

(4) That it is valuable to discuss matters which occur in time.

(5) That no set of symbols—see (1)—can ever hope to reproduce completely what it symbolizes, and hence it is vain to charge formal or abstract reflection with "falsifying" the concrete when it talks about it, and with making the temporal timeless.²²

²² This is by no means the whole quarrel of the psychologist and the "pure" logician. The psychologist maintains that since reasoning and thinking are psychic functions, they must be studied by the psychologist. He adds to this obvious truth the claim that their explanation as psychic

To return to our original inquiry, we shall from this standpoint urge that a logical analysis be given of the meaning of immediacy rather than an historical account of it. In other words, we are asking what differentiates the immediate from the mediate, given both; not at what point does an immediately given become mediate. In still other words, we want a definition of the Aristotelian or at least of the mathematical type, not of the demonstrative type.

Now such a definition is not forthcoming. Writers on epistemology take it for granted that the concept is self-explanatory. And yet as a matter of fact the word's etymology brings out its figurative character. In use its meaning has changed until we now have immediacy signifying,

- (a) contiguity in any series—preferably time;
- (b) acceptance—actual or desirable—without proof.

No doubt there are still other meanings. These two are sufficient to show its ambiguity.

But if we accept the first meaning, the difficulties of application are innumerable. How is one to localize an event in time to such a degree that it can be determined to be contiguous to the other event in time which immediately precedes it? The only way to localize an event temporally is to indicate its simultaneity with another event—unless the time-series have a first member. But whereas that does for historical accounts of daily affairs it has by no means the precision which logic would like to secure—whether it can or no. It introduces the concept of “contemporaneous-ness” which is all very well in analysis but hardly suited for application. If to discover the truth of an idea we have to trace back its history—always a perilous task—and determine other events with which it was synchronous in its

facts is all there is to be said about them. He then adds the well-known words, “There is no saying how we *ought* to think; we ought to think as we do think.”

There is for all this such a phenomenon as valid thinking in distinction to ordinary, careless, often invalid thinking. It too can be studied by the psychologist. But is he willing to admit the basis of its validity to be chimerical? If so, the familiar refutation would be, on what is the validity of that opinion based?

The whole subject is thoroughly discussed in Husserl's first volume to his *Logische Untersuchungen*, Halle, Niemeyer, A.S., 1900.

inception, and then find events temporally contiguous to these, and then determine an event temporally contiguous to the incipient idea itself and synchronous with the second set of events, we may by chance have the good fortune to succeed; but if we do it will be by merest chance. It may be a possible procedure, but hardly an economical one. And then after having determined contiguities, how are we to determine the event with which the idea itself is to be contiguous? What is its nature? Is it another idea, or is it the idea's "object"? When one speaks of the "immediately given," he should clarify a few of these points. He should examine his notion of a mind and see what it means to be "given" data. He should then examine his notion of time and see just what is involved in contiguity in a continuum.

If one takes the second meaning of "immediate," then of course the question is begged. For that which is accepted without proof, is accepted because it is held to be true. And if that be the case, the issue is practically narrowed down to self-evidence, which in turn is an obvious *petitio principii*.

The difficulty of applying the test of immediacy is attached without doubt to almost all other criteria which arise from an affective theory of knowledge. Although this can not be proved *in toto* (for who knows all the affective theories?), nevertheless there are certain facts of a very persuasive nature which incline one towards belief in it. In the main these indicate that propositions have certain forms and characteristics of their own apart from the experiencing of them or of their constituents, namely those characteristics which are the subject matter of "pure" logic. Inasmuch as many of the propositions we are called upon to examine are not and perhaps can not be reduced to experiential terms, the first supposition is that their truth is determined otherwise than in experiential ways—using "experience" to mean "primitive sensory experience." By which I mean that there is no reason to suppose that the experiencing of true entities—ideas, propositions, knowledge—is uniquely characterized by peculiar properties which mark them as true. Experience in some sense of the word may have a great deal to do with truth, but at this stage of the inquiry there is no reason to succumb to the definition of experience mentioned above.

RELATIONAL THEORIES OF TRUTH

(a) THE CORRESPONDENCE THEORY

We have now considered those theories which find the criterion of truth in the acquisition of knowledge, in its ontogenesis. They have laid especial emphasis upon the subjective aspects of the matter. We have not exhausted all such theories. We have merely considered representative points of view.

Another type of truth-theory is that which finds the truth to be determined by a relation. Such theories are of two kinds, (a) where the relation is one between true entities and "objects," "reality," "the external world," viz., the correspondence theory; (b) where the relation is between true entities themselves, the coherence theory. We shall first examine the correspondence theory.

Although this is said to be the usual theory of truth,²³ it is very difficult to find a specific account of it given in any book of logic or epistemology written by its advocates. It has probably been considered self-evident, and suffers from all the obscurity of the obvious.

Taken in its crudest form it says that those ideas are true to which there corresponds an existent reality.²⁴ In the first place we must point out the old confusion between "ideas" and "propositions"—in use—and in the second place we must clarify the meaning of "corresponds" before we can hope to accept this theory even for criticism.

It must I think be admitted that what is ordinarily called an "idea," what is classically called an "idea" is very different

²³ James, W.: *Pragmatism*, New York, Longmans, 1913, pp. 198 ff.

"Truth, as any dictionary will tell you, is a property of certain of our ideas. It means their 'agreement,' as falsity means their disagreement, with 'reality.' Pragmatists and intellectualists both accept this definition as a matter of course. They begin to quarrel only after the question is raised as to what may precisely be meant by the term 'agreement,' and what by the term 'reality,' when reality is taken as something for our ideas to agree with," etc.

²⁴ A still cruder form is found in Bossuet's *De la Connaissance de Dieu et de Soi-Même*, "Le vrai, c'est ce qui est. Le faux, c'est ce qui n'est pas,"

from what is called a "proposition." There may be no such thing as what is classically called an "idea," indeed there probably is not, but at any rate the concept can be amplified to an intelligible extent, questions of existence to the side. "Ideas" from Democritus to Mill meant little more than states of mind non-relational in character. They were of the nature of terms. The mind had "ideas" of a horse, of a man, of whiteness, of God, of the state, or virtue. These ideas were what we represent by our nouns, common, proper, concrete, and abstract. In structure they were identical with, or similar to, or symbols of the "objects" of which they were the ideas.²⁵ It was here that myth arose. It was here that controversy split the camp. At any rate, all were agreed that viewing the mental and the physical as two different realms, you had a physical system of things in relation on the one hand and a mental realm of correspondent symbols of those things in correspondingly symbolic relation. Thus if I saw Brutus kill Caesar, what happened was that a physical Brutus killed a physical Caesar and in my mind, practically synchronously, an ideational Brutus ideationally killed an ideational Caesar. Such a parallelism of involuntary symbol with the symbolized soon roused comment and we have one school announcing the "unreality of one half of the process," the "physical," and another school later on announcing the "unreality" of the other half of the process, the mental.

Whatever may be the relation of these "ideas" to what they stand for, it can not be used as a basis from which to infer anything whatsoever about other entities formed by the relations of these "ideas" to one another. This has been already pointed out. An "idea" may "correspond" to an "object"—indeed it would have to in order to be an "idea"—it may have relations to other "ideas"; it may have relations to objects of which it is not the idea; these facts are all disparate facts: one can not off-hand assert that properties of one fact will be properties of the

²⁵ The school which asserted the similarity of ideas and their objects was that maintaining the so-called "copy-theory" of knowledge. That which asserted the symbolic nature of ideas included men like Descartes and Locke with a conscious criticism of the copy-theory and a substitution of a causal theory—primary qualities (objects) causing secondary qualities (our ideas). The school which asserted the identity of ideas and objects included the "subjectivists" who were really consistent, e.g., Hume.

other facts. In fine, if an "idea" so corresponds to an "object" that it can be called a "true idea," there is no reason to suppose that propositions in which that "idea" has a place will either be true or false. Any theory of knowledge which says that those propositions are true whose terms are "true" must be answered in this wise. It must also be answered by pointing out that the relation in the proposition as well as the total meaning of the proposition is unaccounted for.²⁶

Having pointed out the confusion between terms and propositions which exists for the unwary, let us examine the meaning of "corresponds." We must at the outset distinguish between correspondence as a type of epistemological truth, the correspondence of the representative theory of knowledge, and correspondence as a type of logical truth, the correspondence between propositions and "facts" (Russell).

It is not at all fashionable in contemporary philosophy openly to advocate the representative theory of knowledge, yet there are still writers, vowing allegiance to the "Copernican Revolution," who still speak of the "subject-object" relation as if there were "things" to be known. To them the problem of knowledge seems to take the form, "Does an object change when it is known?" or as it is often put, "Does knowledge make a difference?" This question conceals within itself the Democritean tradition in its simplest form, for when we speak of the knowledge of "things," and wonder whether knowing them changes them or not, we undoubtedly have the feeling that knowledge ought to be a kind of transparency on one side of which is an eye, on the other side things visible. It is practically a tautology to say so. It is evidenced, for instance, by the so-called problem of the reality of the external world. How to define the external world without assuming the internality of the cognitive subject is a greater problem.²⁷ For the modern Democritean no eidola wing their

²⁶ If true propositions were propositions whose terms were true, or true judgments judgments whose component "ideas" were true, then it would seem to follow that an idea of a horse, for instance, in a true judgment was somehow different from the idea of a horse in a false judgment.

²⁷ What I should like to say is said much better than I can say it by Mr. Dewey in "The Existence of the World as a Logical Problem," *Essays in Experimental Logic*, Chicago, University Press, 1916, ch. XI. pp. 281 ff.

way to the impressionable eye; at times ether vibrations substitute for them, at times there is a mere "relation." But in both cases the object of knowledge is a "thing," that is, a color, a sound, a complex of "sense-data," a self, etc. We hear much talk of our knowledge of "the table." And the table as an object of knowledge might well stand as a watchword of the whole school. Apparently it is "independent" of mind. And yet mind "knows" it. But—question I—how can the mind know something which is not mind? The answers are manifold, (a) it can not; (b) it can through "sensations"; (c) it can because the table is made up of sense-data; (d) it can because it has "ideas" of it; etc., etc. The result of all this has been so-called "subjective idealism," "neutral monism," "epistemological dualism." But all these are probably a result of the initial assumption, namely, that experience gives us as the basis of the epistemological problem a mind and a world of things, the latter affecting the former.²⁸ This, to repeat, is essentially the starting point of Democritus, and the contemporary affectivist has the problems of Democritus, viz., how does the world of "things" get into the world of mind? What was fundamentally questionable about Democritus, as far as a theory of knowledge goes, was not his account of the eidola, but his whole conception of knowledge as receptive.

Given a receptive theory of knowledge, it matters not how sophisticated its terminology, and you will have atomic ideas building up a world. For the main problem, as we have said, is first to get from the physical into the mental and to retain its non-illusory character. And when it is proved that the objects of certain ideas are non-illusory, and this is proved by an appeal

²⁸ Mr. Woodbridge has described the fallacy involved in this type of epistemology, though his immediate interest is psychological "sensationalism," as follows: "It is one thing to affirm that 'blue sensed' is a sensation, but quite a different thing to affirm that blue as blue is a sensation. We may speak of the things we have shot as our 'shots' if we are mindful why we so designate them, but it would be improper to affirm that a partridge is a shot. It is, however, just this sort of impropriety of which much psychology has been guilty. It has treated the things we sense as if their qualitative characters were themselves sensations, some kind of mental operation or process, and supposed, consequently, that an analysis of the qualities, intensities, extensities, etc., of the things we sense was an analysis of consciousness itself." "Sensations as Conscious," *Journal of Philosophy, etc.*, vol. X, p. 604.

to a number of witnesses, the ideas, by their relative permanence, by their place in the space-time series, or what not, are true. When the ideas of objects are taken seriously and a dualistic epistemology results, the theory of truth is our correspondence theory. When it is not taken seriously, and a monistic epistemology results, the theory of truth is declared to be unimportant or impossible. For since an idea of an object is not the relation of an object to a mind but is simply the arrangement of certain unanalyzible entities among themselves, there is nothing for the complex when known to correspond to. Why should not the truth of the objects of knowledge be as ultimate as their color?²⁹

In a dualistic receptivism the correspondence may be compared to that between symbol and what is symbolized, between portrait and sitter. My idea of a mule is a true idea when it accurately symbolizes the mule. If an idea be taken as if it were an image, it could be rendered more intelligible. Thus an image of a mule which represented it with five legs might be called false. But to discover the truth or falsity of such a kind of idea, one would first require both the mule and the idea that a just comparison might be made. The oft-cited refutation of such a theory is that we never do have both and hence the criterion of truth is inapplicable.

Because of refinements upon the receptivism of Democritus, the correspondence theory is seldom put in this way. The agreement or correspondence which is believed in was very early made the matter of the object's existence or non-existence. The earliest formulation of this belief seems to be in Aristotle. "It is not because we think truly that you are white, that you *are* white, but because you are white we who say this have the truth."

²⁹ Cf. Marvin, W. T.: "The Emancipation of Metaphysics from Epistemology," *The New Realism*, New York, Macmillan, 1912, p. 59, n. 1. "The question why a proposition is true can mean one of two things, the first of which admits of an answer and the other does not. A proposition is true because some other proposition is true and implies it. But why is that other proposition true, why ultimately is anything true that is true? Well, the question is as absurd as the question, Why is red red? The question asks us to go beyond the ultimate, and its absurdity shows us that truth is ultimate and as such is only to be discovered, and is not to be ascertained by any device which would make it explicable."

[οὐ γὰρ διὰ τὸ ἡμᾶς οἶεσθαι ἀληθῶς σε λευκὸν εἶ σὺ λευκός, ἀλλὰ διὰ τὸ σέ εἶναι λευκὸν ἡμεῖς οἱ φάντες τοῦτο ἀληθεύομεν].³⁰

Such a "correspondence" is that of Aquinas, an *adaequatio intellectus rei*;³¹ and of our contemporary realist, Russell.³² In these opinions no mention is made of a mental state's actually reproducing the existent object. The object—nowadays called an "objective"—is a fact rather than a thing. A fact is any related number of terms symbolized by words beginning with "that." Facts must be assumed to be negative as well as positive. "That America was not discovered in 1898" is just as much a fact as "That Poe wrote *The Bells*."

The first trouble that arises is in the use of the word "fact." We all know, we are glad to admit that a proposition is true when it symbolizes an existent fact; what we are in doubt about, here as well as in more naïve theories, is how to tell when a proposition does symbolize an existent fact. And we demand of our theory of truth just that criterion. The sincere man never doubts that he is "speaking the truth"; he is quite sure that the propositions he phrases have corresponding existent facts. It is a great disillusion when the very opposite is pointed out. But the determination of facts is in a large measure the work of science. Where does it get its criteria; how does it know when corresponding facts are non-existent?

Mr. Russell objects to this argument for his part. He insists that truth is a different thing from the criteria of truth.³³ For

³⁰ *Metaphysics*, cap. 10, 1051b. I quote from Ross's translation.

³¹ *Summa contra Gentiles*, ii, 59, 1.

³² Russell, B.: "On the Nature of Truth," *Philosophical Essays*, London, Longmans, 1910. "Judgment is a relation of the mind to several other terms: when these other terms have *inter se* a 'corresponding' relation, the judgment is true; when not, it is false." (p. 178). "We may now attempt an exact account of the 'correspondence' which constitutes truth. Let us take the judgment 'A loves B.' This consists of a relation of the person judging to A and love and B, i.e., to the two terms A and B and the relation 'love.' But the judgment is not the same as the judgment 'B loves A'; thus the relation must not be abstractly before the mind, but must be before it as proceeding from A to B rather than from B to A. The 'corresponding' complex object which is required to make our judgment true consists of A related to B by the relation which was before us in our judgment. . . . The judgment is true when there is such a complex and false when there is not." (pp. 183 ff.). See also *The Problems of Philosophy*, p. 201.

³³ V. *On the Nature of Truth*, pp. 172 ff.; *Problems of Philosophy*, p. 187.

the latter are simply marks by which the former are known or at least differentiated from other things. By disregarding this distinction, he says, philosophers have fallen into many an avoidable error. Historically the distinction is akin to the scholastic *causa essendi* and *causa cognoscendi*.

Such a distinction is indubitably justifiable. The causes of the American Revolution are to be sure other than the causes of our knowledge of it. So nitrogen might seem to be different from the criteria of nitrogen. But when it comes to a discussion of nitrogen we shall first be given several tests for it, by which tests we can tell it from hydrogen, for instance. We are told that nitrogen is a colorless, tasteless, and odorless gas. Its atomic weight is 14.01. When liquefied, it boils at -194° . It is only slightly soluble, etc., etc. Hydrogen too is colorless, tasteless, odorless. But it is much lighter. We learn that if the atomic weight of oxygen is taken as 16, the atomic weight of hydrogen is 1.008. It dissolves in water at 15° to the extent of 1.8 volumes, etc.³⁴ And no matter how far we push the matter, we learn of one thing only as it is differentiated from another. How otherwise can we talk? We have but names and signs to deal with in discussion. We are thence forced into a treatment of criteria. This does not prove that things are merely their differentiae, that substantial predicates are always illusory. It simply points to the impossibility of making good the claim of discussing an entity's nature without regard to the means of knowing it from other entities. When Mr. Russell says that truth *is* the correspondence of fact and belief and that truth is not thus known necessarily, he is willy-nilly telling us how truth is to be known or distinguished from other things. If he is not helping us select truth, what is the purpose of naming it, denoting it, pointing to it, defining it? For all truth may conceivably *be* anything you choose, it must be something in particular when it is defined or discussed. Being something particular is to be differentiated. And to indicate its differentiation is to indicate criteria of knowing it.

³⁴ These simple commonplaces can be found in any text-book of chemistry.

To return to our matter in hand, we have no way of telling what a "fact" is, or better, of telling when a proposition symbolizes an existent fact and when it does not. False propositions moreover assert something. Do they assert then a fact which does not exist?³⁵ For instance are we to assume with Meinong that our world of Being may be divided into Subsistence and Existence, into the former of which go all impossibles? Such a position might be upheld at a venture. But when one had accounted for the non-existent by means of the subsistent, there would still be the non-subsistent to account for. Granted then worlds of super-subsistence—worlds which no one, probably, has yet ventured to acclaim—the earlier problem of discovering the membership of the facts in which we believe in these worlds is still unanswered. It is one thing to maintain that "Shakespeare wrote *Sordello*" is false because a non-existent or unreal or subsistent "objective" or fact corresponds to it; it is another to tell us how we are to find out the non-existence of the fact "that-Shakespeare-wrote-*Sordello*." Until the recipe is given no one will lend a credulous ear to the theory. For it tells him nothing. If it were not necessary to ask for this recipe, if we could detect the truth without fail, the theory would be thoroughly satisfactory. As things are it is certainly unintelligible. Its hypotheses seem plausible enough, but they preclude their own verification.

Is the correspondence theory self-critical? If truth is the correspondence of propositions with facts, then there ought to be a fact corresponding to the correspondence theory, if it be true. If it be true, there is undubitably a fact corresponding to it, of which it is the description. Yet the theory's inapplicability prevents our discovery of this fact. How are we to know whether there is a corresponding fact or not? Where are we to find the missing fact which will warrant our assertion of its truth? In the long run one must leave the question, saying that the theory is self-critical only if the theory is true.

We have admitted that the theory accounts for false propositions as well as true propositions—at least in one of its formulations. Whether it accounts for meaningless propositions is

³⁵ Cf. Montague, W. P.: *The New Realism*, pp. 252 ff.

more questionable, a situation which is all the stranger when one remembers that Mr. Russell himself first called attention to meaningless propositions. True propositions correspond to existent facts; false to non-existent facts; to what do meaningless propositions correspond? To anything? In the world of Being, some entities exist and some subsist.³⁶ Among the subsistences are all unreal entities, all non-existent entities, such as fictions, impossibilities, and the like. Since to "correspond" means to "symbolize"—is this an unjust interpretation?—we have true propositions symbolizing existing facts, false propositions symbolizing non-existent or subsistent facts. But meaningless propositions symbolize something. If not, how does one know that they are meaningless? And if the scheme which differentiates true and false be consistently applied, meaningless propositions, a class which excludes both true and false, should also be differentiated by what they symbolize. But the dilemma into which one now falls is destructive. If they symbolize existing facts, they are true; and if they symbolize subsistent or non-existing facts, they are false; and if they symbolize nothing, they are not propositions. Yet a propositional function—which is of course neither true nor false—has some content, stands for something, is a symbol. It may be meaningless in the sense that it is of indeterminate truth-value. But it most decidedly "means" something, it is significant. If not, why use it? "X is a man" represents something; is that something existent or non-existent? One does not know.

The theory moreover does not make any attempt—no correspondence theory could—to account for the truth of "practical" propositions, a failure which Mr. John Dewey has recently noted.³⁷ The hedonistic theory and the irresistibility theory, both could if extended include "judgments of practice." But correspondence theories consider all propositions to be merely historical or descriptive. If one inquires about the truth of "The United States should fortify the Panama Canal," he is balked at once in his attempt to find a correspondent fact. Even granted

³⁶ This is of course not orthodox Russellianism. It is a combination of Meinong and Montague and Holt (in the *Concept of Consciousness*).

³⁷ See "The Logic of Judgments of Practice," *Essays in Experimental Logic*, p. 336.

that a recipe for discovering facts has been perfected, there is and can be no fact corresponding to something which symbolizes not an "is" but a "should." Nothing whatsoever is being described, nothing literally is being predicted. A "plan of action" is being laid down and nothing more. Unless plans of action when asserted are peculiarly unsusceptible to the attributes "true" and "false," although all other significant propositions are susceptible, something must be done about them. One can not simply ignore them and think thus to have explained them.

A correspondence theory does at first sight seem to have the merit of generality. It does not seem to presuppose—especially as phrased by Mr. Russell—a specific metaphysic or epistemology. This is due to the fact that the Democritean tradition is almost an accepted commonplace with most of us. We have however already indicated some very specialized and by no means self-evident postulates which it requires. As for the *Gegenstandstheorie* which Mr. Russell's statement seems to require, who will admit that it is highly general? It is not the elementary notions of logic or psychology, acceptable to almost anybody—if there be such—that are involved, but highly abstruse and very debatable notions. The dichotomy of Being into Existence and Subsistence alone is enough to rouse a hue and cry after less specificity.

No one need deny the great difficulty of knowing how little to presuppose, how much will follow from a few postulates. In discursive thinking of this sort there are innumerable opportunities for error and inexactness. Granted that these difficulties exist, it is always possible to make an attempt for great exactness, particularly in the initial analyses. It is always possible to try out a few postulates and see where they lead. Instead of gratuitously assuming that every proposition symbolizes a "fact," that every "idea" stands for an "external" "object," it would be a much more economical, and indeed a more elegant procedure, to take one postulate—if it be well to call it a postulate—"Propositions are signs," and experiment with that. Such a postulate would inevitably lead to a revision of both metaphysics and epistemology, but all it presupposes is an inductive study of the nature of signs (with the rules of ordinary logic). It does

not presuppose individually isolated "minds" receiving impressions from the "external world"; it does not presuppose a world of "pure experience"; it does not run behind the subject matter bounded by its own interests to discover additional foundation.

To return to the discussion itself, what are the faults of the correspondence theory?

The faults of the correspondence theory are in brief these:

(a) It furnishes no means of applying its own criteria of truth.

(b) The specific epistemologies upon which some of its expressions are based preclude applicability.

(c) Its lack of applicability precludes self-criticism.

(d) It gives no account of meaningless and "practical" propositions.

(b) TRUTH AS FORMAL CONSISTENCY

One of the most usual ways of refuting a man's opinions is to point out their inconsistency. It is to take certain of the propositions he enunciates and indicate a contradiction among them. This method rests upon the "law of contradiction," namely, that two contradictory propositions can not both be true in the same system.³⁸ If a system contains both p and $\neg p$,

³⁸ This is of course not the law of contradiction as usually phrased. It is generally taken to describe the comportment of terms not of propositions, in which case it reads, "It is impossible for the same thing both to be a and not to be a ; or, a is not $\neg a$." (I use Creighton's formula. Creighton, J. E.: *An Introductory Logic*, ed. 3 enlarged and revised, New York, Macmillan Company, 1916, p. 350. The reference in Aristotle is *Metaphysics*, Bk. III, ch. 4.) There are certain difficulties in this interpretation. To begin with, it is relevant only to subject-predicate propositions. Propositions which assert other relations, e.g., "Wilkes Booth killed Abraham Lincoln," or "100 is greater than 50," cannot without revision be looked upon as propositions which attribute class-predicates to a subject. The contradictory of "Wilkes Booth killed Abraham Lincoln" is not "Wilkes Booth killed someone who was not Abraham Lincoln," but "Wilkes Booth did not kill Abraham Lincoln." This merely indicates that one denies the verb (the relation) in a proposition, not the terms.

But even if all propositions are subject-predicate there is trouble about the meaning of "is." If "is" means "has the predicate" or "belongs to the class," the law is false. For an entity can belong to the class a and also to the class $\neg a$. To avoid this trouble, a theory of "opposing" predicates and classes is built up. It seems probable, however, that such a theory would be made superfluous by our interpretation of the law.

If "is" means "is identical with" we are led into the tangles which Hegel first pointed out. In the proposition, "The rose is red," he notices

then something is wrong. What is wrong is not quite clear. To point out that two propositions are contradictory is simply to state a certain relation which subsists between them; it is not to point out which is false and which is true.

If the presence of contradiction insures the falsity of a system its absence may be taken as insurance of its truth.³⁹ But when this is accepted at once a new conception of truth as an attribute of propositions is admitted. And that conception is that no single proposition is true in isolation from other propositions; it is true only by virtue of its place in a system. This is one of the most important shifts in emphasis which we have as yet encountered. In effect it keeps truth in the realm of logic alone, abandoning epistemology and psychology. If there were no knowledge, if there were no world to be known, if there were nothing but the symbols called propositions, there would still be truth. No matter what the genesis of these symbols, no matter what their place in the life of the individual, their truth is determined by their relation to other symbols. It is a question whether this detachment is not suicidal.

In considering this theory of truth we must first note the characteristics of systems of propositions. A system of propositions is the class of propositions implied by any given propositions, which may be called the postulates of the system. To

an identification of two things which are different. This impels him to say that all propositions assert identity in difference, a contradiction which he justifies by his theory of ontological negation. (Hegel, G. W. F.: *Wissenschaft der Logik*, Berlin, Duncker and Humblot, 1841, pp. 26 ff., in particular p. 32. Cf. Bosanquet, B.: *Principle of Individuality and Value*, London, Macmillan & Co., 1912, pp. 223 ff.) Again in the proposition, "This horse is swift," you have an assertion of the identity of a universal "swift" with a particular "this horse," an assertion which in its turn leads to the doctrine of the "concrete universal." (See Royce, J.: *Spirit of Modern Philosophy*, Boston and New York, Houghton Mifflin Co., Appendix C, for an account, put together from the many references in Hegel's works, of the "concrete universal.")

In view of these facts we prefer to treat the "law of contradiction" as a law not of terms but of propositions.

The words "in the same system" above are especially important. Consistency gives us no way of telling which of two propositions in isolation is true.

³⁹ This is not a case of simply converting a universal proposition as that case is ordinarily understood. The proposition here in question is a definition and as such its subject and predicate should be interchangeable. A definition is of the form "All S is PQ." To convert it we can read "PQ is S." So here "Falsity is a system-which-is-not-consistent"; "The system-which-is-consistent is not-Falsity."

insure the system's consistency, the postulates must be mutually non-contradictory, since it is assumed that if two propositions are consistent, their implications are consistent. For the sake of elegance, the postulates of a system must be independent, one of them must not be inferred from another. Examples of such systems are the propositions which make up Euclidean geometry. If these propositions contain no inner contradictions, then the system is "true."⁴⁰ And this, says the consistency theory, is all the test of truth we have. When we investigate single propositions, we may best say that if a proposition can generate a consistent system of propositions, then it is true.⁴¹

In the actual dealing with propositions, we find that the test is more negative. "Those propositions are true which do not imply their contradictories." Whether the apparent negativity of such a criterion is objectionable, we shall not discuss here. But it is interesting to see that one can never quite tell once and for all whether a proposition is wholly true. "So far," we may say, "it has not been proved false. In time we may see that by carrying its implications out further a contradiction appears; but no contradiction appears at this point. For all we know it is true, and yet it may later on be proved to be false. Had we the exact postulates by which it is implied, we could examine them for independence and consistency. But in most cases we have not. And so wait we must."

⁴⁰ Mr. Russell has given this account of the proof of a logical system. "The proof of a logical system," he says, "is its adequacy and its coherence. That is, (1) the system must embrace among its deductions all those propositions which we believe to be true and capable of deduction from logical premises alone, though possibly they may require some slight limitation in the form of an increased stringency of enunciation; and (2) the system must lead to no contradictions, namely in pursuing our inferences we must never be led to assert both p and $\text{not-}p$, i.e., both " $\vdash p$ " and " $\vdash \neg p$ " cannot legitimately appear." (Whitehead, A. N., and Russell, A. W. B.: *Principia Mathematica*, Cambridge, 1910, vol. I, p. 13.)

If this be an accurate account of the matter, and if "proof" is a test for truth, though that is, to be sure, a debatable point, it is clear that formal consistency as truth is, as we say above, a reduction of truth to something purely "logical," something in the world of symbols alone. It is interesting to compare the truth one gets from formally correct syllogisms whose premises are wilfully false.

⁴¹ As far as we know the only propositions implied by a single proposition are those which assert that any entity related to an entity symbolized by the terms in the given proposition is related to an entity which has the relation asserted in the given proposition. For example, the proposition which asserts that x is related to y implies that any entity

This is a good account in many respects of just what happens to our knowledge. Propositions which we begin with as true, turn out to be false. Knowledge, as many a thinker has pointed out, progresses by refuting itself. But it is a question whether the refutation goes on quite as the consistency theory demands. The world was proved to be round, for instance, not by demonstrating the self-contradiction in terrestrial flatness, but by sailing round it.

When one considers an instance like this, and reflects upon its significance, he sees characteristics of truth which he neglected before. The most important of these is the place of experimentation. If truth is simply a matter of consistency, why bother to experiment? Why not take any postulates and make your deductions from them? Or, to phrase the question differently, "Why was it necessary to sail round the world to prove that it was not flat?"

One can build up a perfectly consistent system round the proposition, "The earth is flat." And yet one can not sail round a flat earth. But what difference does that make so long as consistency has been achieved?

The objection to our criticism, that one of the implications of the proposition, "The world is flat," is "The world can not be circumnavigated," and that *since the world can be circumnavigated*, the proposition implies its own contradictions, would

related to x is related to an entity which is related by the given relation to y . "George Washington married Martha Custis" implies that "The friends of George Washington are the friends of a man who married Martha Custis." (Cf. Royce, J.: "Some Psychological Problems Emphasized by Pragmatism," *Popular Science Monthly*, Oct., 1913, p. 403.) It will be noticed that all such propositions will be consistent. There may, to be sure, be other types of system implied by single propositions which are not by their nature necessarily true.

This principle of deduction which was first, I believe, noticed by De Morgan ("On the Symbols of Logic," *Transactions of the Cambridge Philosophical Society*, 1850, p. 85), does not in the strictest sense of the word indicate implication by a single proposition. De Morgan's example is "The owner of a horse is the owner of an animal. The friend of the owner of a horse is the friend of an owner of an animal." But this before it is known to be valid reasoning must be seen to conceal a "major premise" in the person of the methodological axiom stated above. Without that axiom no implication would be possible. Such axioms may be held to be mere verbal formulae of inferences which are actually made without reference to them. Such an opinion may be perfectly valid; the important point is that the cases described by the axiom have identity of form which warrants generalization. The genetic priority of particular proposition or general proposition need not disturb us.

never probably be seriously offered.⁴² For it is on the face of it untenable. The contradiction which is the evidence of falsity—if the consistency theory is itself consistent—must arise within the system and the contradictory proposition in this case arises from without, from experimentation. The system of propositions itself is perfectly consistent.

One might say that every proposition “implies existence.” Aside from the dangers incurred on the part of universal propositions, this notion would not be any too helpful. The proposition, for instance, “Sugar makes coffee sweet” if it “implied existence” ought to be verified by “experience.” We ought to be able to put sugar into coffee and find it sweet. But the fact that we can thus act and experience is certainly different from the proposition which symbolizes a fact which incites us to make the test. A proposition is either different from its subject matter, or there is no such thing as logic. The fact, then, that the world can not be circumnavigated is a different entity from the proposition, “The world can not be circumnavigated.” Without going into metaphysics, one can see that in a world where propositions were facts, such a phenomenon as “the method of trial and error” would be impossible. For there could be no error. Once and for all propositions are symbols and facts are what they

⁴² A. H. Loyd says that “the ordinary belief” about truth is “conformity to an external reality, to things, so to speak, out there, and complete consistency with self; or, more concisely, external conformity and internal consistency.” (A. H. Loyd, “Conformity, Consistency, and Truth: A Sociological Study,” *Journal of Philosophy, etc.*, vol. X, 1913, p. 282.)

This “ordinary belief” attempts to preserve all the benefits of the consistency-theory together with those of the correspondence-theory. No doubt its supporters would answer the question raised in the text by calling upon “correspondence with fact” (i.e., “conformity” with fact) for aid. Until they demonstrate an identity between the two relations of propositions, however, they can hardly legitimately use one to supplant the other. At first sight they would appear vastly different. Certainly they have been different historically. Their coöperating is interesting but not very illuminating.

Cf. also Jacobson, E.: “Relational Account of Truth,” *Journal of Philosophy, etc.*, vol. VII, p. 253. “To be true is, with reference to some determinate system of relations, to designate certain relations which are implied by the system” (p. 257). “The relational definition is very sharply to be distinguished from the description of truth as mere ‘systematic coherence’ The Ptolemaic theory . . . is quite systematic and yet is held to be false. The real reason for this is that *internal consistency does not make the thing that has it true*. It requires consistency with external things for that, and then the thing is true only with reference to those external things.” (p. 258. Italics in the text.)

attempt to symbolize—be “symbols” and “facts” whatever you please. Contradiction is here a property of symbols—I do not say it has no “factual” analogy—and can not subsist between a symbol and a not-symbol.

What the consistency theory seems to overlook in its very detachment is what the correspondence theory might call “the objective reference” of propositions. This objective reference may not be, and, as this paper will argue, probably is not, the “world of objects.” We shall maintain that it is bound up in the nature of meaning and can be discovered only through an examination of meaning. Forgetting that for the present, it is only by a recognition of the importance of the objective reference that a theorist can hope to save his thinking from mere triviality. If the building of systems is the mere deduction of consequences from amusing postulates, if it is a game, then truth may very well be the non-contradiction of the consequences, when certain rules are obeyed in phrasing and selecting postulates. Truth, then, is an esthetic quality. And, as so many writers say, it is purely relative to the postulates chosen, what propositions will be true. Moreover the choosing of postulates is a purely arbitrary matter. Thus the non-Euclidean geometries in their perfect consistency are said to be quite as “true” as Euclidean geometry. Every fact, we are told, which is explained by Euclidean geometry can be equally explained by non-Euclidean.

And yet is the choosing of postulates and indefinables as arbitrary as it seems? Is any proposition as good as any other proposition for a postulate? If so why should a man choose P, rather than its contradictory? The answer may be simply to see what it implies. True enough. But let us assume a postulate which is ordinarily called “false,” “Matter is continuous.” Will this ever contradict itself or will it contradict other postulates and theorems which we know to be “true”? Only the former is a valid objection on the part of the consistency theory. As soon as “facts” are brought in, or already proved theorems from other systems, the consistency theorist has given up his standpoint. It is tacitly to admit another criterion of truth than that of consistency.

Whereas it must not be forgotten that the consistency theory holds only systems to be true, there is a sense of the word in which single propositions can be said to be true. The most hardened formalist clings to non-contradiction because "true" propositions imply "true" propositions. Their truth is carried on through the channels of implication. It is thus that the premises of Aristotelian logic can be called "true," or the postulates in contemporary logic. Obviously such "truths" are not the concomitant of consistency. For conclusions are known to be true when premises are true; premises may be either true or false without respect to their conclusions. Thus it is not nonsense to inquire into the truth or falsity of the very postulates of a system since the "process of inference"⁴³ guarantees the truth only of what is implied by the true.

In what sense of the word are postulates true or false? Whitehead and Russell's primitive proposition *1.1, "Anything implied by a true elementary proposition is true," for instance, is of course nowhere proved in the *Principia Mathematica*.⁴⁴ It is purposely an undemonstrated proposition. But it has meaning and whether susceptible to proof or not, whether self-evident or not, it is *liable* to truth or falsity. Again take the equation, the instantaneous velocity of a body is equal to the product of the acceleration and the time;⁴⁵ or the first Ptolemaic postulate

⁴³ See Whitehead and Russell: *Principia Mathematica*, Cambridge, 1910, vol. I, pp. 7 and 9, for the "implicative function" and "the process of inference."

⁴⁴ The word "prove" might much better be used in the sense of "to test" as it once was, than in the sense of "to establish firmly" as it now is. (Cf. Sidgwick: *The Process of Argument*, London, A. and C. Black, 1893, p. 90 n.) For all that is done in any proof is to apply certain methodological axioms to given propositions and see what happens. As far as establishing anything goes, if the propositions are cases in point, their "truth" is already established and nine times out of ten in formal reasoning all one does is to substitute an *a* for an *x* or to assert that members of a class have certain properties which make them members of the class. Thus most *formal* reasoning becomes as much a *petitio principii* as the syllogism-according-to-Mill.

What the consistency-theory does is to look for truth in this process of proof. It reasons that if proving is establishing the truth, the truth must be found in the very process. It then quietly assumes that truth *is* the process and nothing else, forgetting (a) that the process is worthless unless it directs the flow of already known truth by linking a proposition of unknown value to a true proposition, and (b) that the last term even in a continuous series is not the series. Wherefor a house is not the swivel-chair in the contractor's office.

⁴⁵ Mach, E.: *Science of Mechanics*, tr. by J. J. McCormack, Chicago, Open Court Publishing Company, 1907, p. 269.

as given by Tannery, "The sky is spherical and moves as a sphere";⁴⁶ or Veblen and Young's first assumption for projective geometry, "If A and B are distinct points, there is at least one line containing both A and B";⁴⁷ there is once more the possibility of a doubt; they are—nowadays at any rate—open to question; it would not be nonsense, though it might be futility, to ask about their truth or falsity. With such typical examples before one, it would be useless to say that postulates in themselves are not true nor false, that it is only the system which can be thus described, since postulates, however arbitrarily chosen, have meaning and the very fact that they are not gibberish insures their claim to truth. It is perfectly legitimate to write postulates without the sign of assertion, to denote that they are mere assumptions, but what is assumed in each instance is the truth of the postulates.

This truth, to reiterate, may be a quite different kind of truth from that of theorems. What kind of truth is it? According to the process of inference, it is that kind which guarantees the truth of theorems. It is because postulates are true that theorems are true. As for mere consistency, when one sees how readily a false proposition will yield a consistent system, i.e., a system without contradiction, he begins to realize that the kind of truth which men are seeking is not the truth of systems so much as the truth of postulates.⁴⁸

⁴⁶ Tannery, P.: *Recherches sur l'Histoire de l'Astronomie*, Paris, Gauthier-Villars & Fils, 1893, p. 88.

⁴⁷ Veblen, O., and Young, J. W.: "A Set of Assumptions for Projective Geometry," *American Journal of Mathematics*, vol. 30, 1908, p. 348.

⁴⁸ Schiller, F. S.; *Humanism*, London, Macmillan & Co., 1912, ed. 2, p. 47. "To define truth as systematic is at once to raise the question of systematic falsehood. For false assumptions also manifestly tend to complete themselves in a system of inferences, to cohere together, to assimilate fresh facts, and to interpret them into conformity with themselves, in short, to assume all the logical features that are claimed for 'truth.'"

If we take a proposition which is generally accepted to be false, without regard to the *reason* of its falsity, "Homer was born in 1898," for example, by virtue of the axiom, "Whatever is related to an entity which is related to other entities, is related to the entities which are related to the given entity," we can construct a system of propositions which is perfectly consistent. Homer was born in 1898 implies that Homer was alive during the Spanish-American War, that he might have had a father who took part in the war, that whatever is likely to have happened to a person born in 1898 might very well have happened to Homer. By the introduction of new propositions we can introduce a variety of terms into our system. But whatever falsity arises will arise

That postulates have a sort of "standard" truth seems to be admitted by those who maintain the "relativity" of truth, that what a man holds to be true depends upon his assumptions. Assumption P_1 will often imply different propositions from assumption P_2 . And the man who assumes P_1 will have beliefs different from those of the man who assumes P_2 . But what each assumes is the truth of his assumptions, and because he assumes them to be true, he is willing to accept their implications. The question such a relativist must answer is why his assumptions are true.

To sum up, then, it is asserted that truth arises with consistency. But postulates themselves are true. And propositions which are either true or false can generate consistent systems. The truth of postulates can not be consistency because postulates do not occur within a system, i.e., two contradictory postulates are interchangeable in any system without loss of consistency. Consequently the truth of postulates, if different from that of theorems, is well worth investigating, inasmuch as it guarantees the truth of systems.

It must be noted at this point that

- (a) Two false propositions may be consistent, e.g.,
 1. William James wrote *Canterbury Tales*.
 2. The domestic cat has six legs.
- (b) Two false propositions may be inconsistent.
 1. The moon is made of green cheese.
 2. The moon is made of maple sugar.
- (c) A true proposition and a false proposition may be consistent.⁴⁹
 1. Cambridge is in Massachusetts.
 2. It rains all the time.

from the relation the propositions—proved or assumed—bear to "facts" or "what we know to be true," and not from the relation they bear to one another. The mere proposition "Homer was born in 1898" is no more productive of an inconsistent set of propositions, than the proposition, "Homer was born c. 1000 B.C." There is no formal difference in these propositions. Why should the accepted one be thought more fertile in consistency than the rejected one?

⁴⁹ In the propositions of "c," "true" is used to denote propositions which nobody would dispute, which everybody would accept as true. This does not presuppose a theory of truth as it might seem. It simply takes a given subject-matter—and subject-matters *are* given—and if it be no

(d) Two true propositions may be inconsistent.⁵⁰

1. Through any point, one and only one line is parallel to a given line (Euclid).

2. Through any point there are two lines parallel to a given line, each meeting the line at infinity (Lobatchewsky).⁵¹

If these observations are accurate, consistency and truth are perfectly irrelevant matters. The objection to observation "d" that the two propositions are taken from two different systems and hence present no fair criticism is untenable. Two true propositions from the same system would always be consistent, since all that is meant by their truth and their being in the same system is their consistency.⁵² Observation "d" is indeed crucial, since it is the truth of the postulates which generate the system that we are investigating. It would seem that consistency as a test of truth ought to hold as regards all propositions, i.e., all true propositions ought to be consistent, or that discussions of truth ought to center about the truth of postulates. But the former is certainly not the case. The truth of theorems is almost always held to be a relative matter by those who maintain the consistency theory. And the truth of postulates certainly is not due to consistency, inasmuch as (see above) between two contradictory postulates there is often no preference whatsoever.

Truth as formal consistency is not self-critical. For the axioms and postulates assumed by it are on no other "plane" of validity than axioms and postulates in general. There is no way

wrong selection, the subject-matter must be explained by the theory. So here we take a proposition which mystic, hedonist, consistentist, coherentist would accept as true, and point out a certain relation it sustains. It is the work of the consistentist either to deny that the propositions given are true, or to explain why they are true. The discipline involved—that of the limitation of subject-matters—is of no strict concern to us here. It puts the question, "How far does a question answer itself?" "How does one know that x is a ϕ when he is investigating the 'nature' of ϕ ?"

⁵⁰ "True" is here used in the sense of the consistency theory, i.e., propositions occurring in consistent systems.

⁵¹ I follow the phraseology of Whitehead and Russell, "Geometry," *Encyclop. Brit.*, ed. 11 (VI), p. 727.

⁵² Some modification of this statement might be desirable. By "all that is meant by their being in the same system is their consistency," I desire to indicate the *necessary* consistency of propositions in the same system. An "inconsistent system" is a contradiction in terms, according to the accepted meaning of "system."

of knowing but that their very contradictories would generate an equally consistent system.

The theory is, however, remarkably free from foreign assumptions; it is not prejudiced by metaphysical or psychological foundations. It is busied only with the *logical* definition of truth, and as far as ordinary logic goes, as far as our knowledge of propositions in relation to one another helps us, we can scarcely hope for more than formal consistency affords. The question is whether formal logic helps us at all. The question is whether truth must not be an indefinable for logic; whether truth is not a concept prior to logic, since all logic uses truth in its initial steps. This may be acceptable if one does not go too far, to the point of saying that what is logically prior is indefinable, where "indefinable" means "indescribable."

If propositions which would ordinarily be stamped as false are to be justified as true by this theory, the only false propositions would be self-refuting propositions, propositions whose assertion implies their denial. This gives us a standard for falsity, but it grants the subsistence of very few, if any, false propositions. A proposition such as "there is no truth" is self-refuting, since it itself is held to be true. It refutes itself however not by generating inconsistency, but by appealing to fact. The dialectic of the situation runs thus: *No proposition is true. But all propositions claim to be true. Therefore this proposition claims to be true. But in claiming to be true, it refutes itself, for it says that no proposition is true. If, on the other hand, it is self-descriptive, then it is false, and some propositions are true.* The appeal to fact of which we speak may not be audible at the outset. It occurs as soon as we bring in the proposition, "All propositions claim to be true." This proposition is in no sense of the word implied by our given proposition. It is an axiom required for all thinking, or a description of the comportment of all propositions. But it is brought in from without; it is not a consequence of the proposition "No proposition is true." It is, in fine, simply a proposition which we accept—for very good reasons of course—to be true, no matter what our definition of "true" may be. It is highly likely that no proposition is *formally*

self-refuting. The reason for believing this is that an isolated proposition has implicative fertility by virtue of some assumed methodological axiom. By itself it would imply nothing.⁵³ I do not say that we must not employ self-refutation, but we must realize what it means. It is in the main a non-formal affair, an invocation of a something "which we know to be 'true'" as an aid to our inferences. So much for falsity. As for meaningless propositions, the consistency theory can say nothing on that score. The very conception of meaning is foreign to it.

How we are to apply this test of truth is the greatest mystery of all. We are asked whether Columbus discovered America in 1492 or 1498 and we are baffled. Formally both generate consistent systems, revising our usual opinions to be sure, but not contradicting themselves. The process of applying this test is like the process of cross-examination: the result discovered is that someone is lying. But the activity of knowledge is out for a more definite end than that; it wants to discover not only that something is false but what is true.

In testing judgments of practice it is useless. Whether the present administration should be reformed or not, for example, is irrelevant to logic. For in such a case truth is seen to be concerned with the particular content of the particular proposition and is seen to be no matter of its formal properties. We should be able to test a practical proposition by confining our attention to the proposition itself. If logic has to any degree the generality of mathematics, questions arising from the particularity of certain propositions have no place in it.

(c) COHERENCE IN A "SIGNIFICANT WHOLE"⁵⁴

The difficulty of formal consistency as a test of truth is that since all propositions have a place in some system, if only in one generated by themselves, all propositions are true. To many

⁵³ See note 41.

⁵⁴ This section considers what are usually called "absolutistic" theories of truth. As representatives of this view I have chosen Hegel primarily, for he is after all the founder and supreme exponent of absolute idealism, Royce, Bosanquet, Bradley, and Joachim. These men are all absolutists and idealists, and whereas their theories of the Absolute's nature may differ, they are in a certain accord. Royce, it is true, with his voluntaristic

thinkers this result would be enough to effect the abandoning of the postulates which gave rise to it. But to other thinkers it is merely a sign of incomplete thinking, and an impulse to carry the implications on until the contradiction is resolved.

All propositions are true, they say, and all propositions are at the same time false. But their truth is only a fractional truth, or, in popular language, a "relative" truth.⁵⁵ Total truth, truth which is self-sufficient, can not be found in isolated propositions by themselves. It is only found in coherent systems, in the coherent system which is the Absolute.⁵⁶ The Absolute System is naturally never comprehended by a human mind;⁵⁷ it is known only by the Absolute Experience. It is the Absolute Experience made self-conscious. The character of this experience is such that (a) its content is all that is, and (b) it is known by itself. Such an entity can be found only in a monistic idealistic metaphysic. It must be borne in mind in examining the notion that truth is still said to arise only through consistency and that provided a system can be found such that it includes all possible systems, that system will be "the Truth." Since all propositions

interpretation of knowledge, with its implications, with his "reflective method" (see *The World and the Individual*, vol. I, p. xi; also "The Problem of Truth in the Light of Recent Discussion in *Wm. James, etc.*, pp. 242 ff.) which Bosanquet almost explicitly rejects (*Principle of Individuality and Value*, pp. 46 ff.), with his doctrine of interpretation, is the most original and independent of the group, and by his own description of himself owes as much to Schopenhauer as to Hegel (Preface to *The Problem of Christianity*, p. xiii). And yet one has only to read his "The Possibility of Error" (*The Religious Aspect of Philosophy*, ch. XI) to realize how close he is to Hegel in his theory of truth. This is the basic uniformity of these men. I have tried to express it, without undue distortion, I hope, in the general statement of what I call, "coherence in a significant whole."

⁵⁵ V. Bradley, F. E.: *Appearance and Reality*, ed. 2, London, Sonnenschein, 1908, pp. 362-63. "There will be no truth which is entirely true, just as there will be no error which is totally false. With all alike, if taken strictly, it will be a question of amount, and will be a matter of more or less. Our thoughts, certainly for some purposes, may be taken as wholly false, or again as quite accurate; but truth and error, measured by the absolute, must each be subject always to degree. . . ."

⁵⁶ "The words, *This is true*, or *This is false*, mean nothing, we declare, unless there is the inclusive thought for which the true is true, the falsehood false. No barely possible judge, who *would* see the error if he were there, will do for us. He must be there, this judge, to constitute the error. . . . Our thought needs the Infinite Thought in order that it may get, through this Infinite judge, the privilege of being so much as even an error." Royce, J.: "The Possibility of Error," *Religious Aspect of Philosophy*, Boston and New York, Houghton, Mifflin, 1885, p. 427.

⁵⁷ V. Joachim, H. H.: *The Nature of Truth*, Oxford, Clarendon Press, 1906, pp. 78 ff.

belong to the system, all propositions are true; the distinction which we make between truth and falsity rests upon some peculiarly human difficulty, such as the confusion between "appearance" and "reality" or upon our point of view or the purpose we have in mind. It would not be unfair to say, I think, that Truth is identified with Reality.⁵⁸ Hence it is absolutely determinate. Since the human mind is not all Reality, human knowledge cannot properly be said to be true. If truth is only relatively determined, the standard varies according to the theorist.

It is well now to note the main presupposition of absolutism. It is that whatever the truth is it must be self-sufficient, a whole.⁵⁹

⁵⁸ Cf. Bradley, F. E.: "On Appearance, Error, and Contradiction," *Mind*, 1910, n.s., XIX, p. 158. "Truth demands at once the essential difference and identity of ideas and reality. It demands (we may say) that the idea should in the end be reconstituted by the subject of the judgment and should in no sense whatever fall outside. But the possibility of such an implication involves, in my view, a passage beyond mere truth, to actual reality, a passage in which truth would have completed itself beyond itself." See also Mr. Bradley's other article, "On Some Aspects of Truth," *Mind*, 1911, n.s., XX, p. 331, where he reiterates this point and adds that it is impossible to know in detail how all this happens.

See also Bosanquet, B.: *Logic*, vol. II, p. 263, n. "a"; *ibid.* bk. II, ch. IX, pp. 266 ff., pp. 291 ff.; ch. X, pp. 303 ff.

⁵⁹ Bradley: *Appearance and Reality*, pp. 363, 364. "Truth must exhibit the mark of internal harmony, or again, the mark of expansion and all-inclusiveness. And these two characteristics are diverse aspects of a single principle . . . to be more or less true, and to be more or less real, is to be separated by an interval, smaller or greater, from all-inclusiveness or self-sufficiency. Of two given appearances the one more wide, or more harmonious, is more real. It approaches nearer to a single, all-containing, individuality. . . ."

V. also Bosanquet, B.: *The Principle of Individuality and Value*, p. 41. "To doubt is to assert a ground for doubting, and . . . the tendency of the logical progression, however far from fulfillment, is 'to leave no room for doubt'; that is to say, to organize experience in such a way that at whatever point you may try to pick up a positive content and push it against the system, you will be shown that the effort is anticipated, and only takes you back into the system itself. This is to appeal to the principle that truth or reality is the whole. According to this, the reason why you cannot contradict the truth is that it leaves outside it, no $\pi\alpha\rho\upsilon\ \sigma\tau\omega$ on which a contradiction could be grounded." Cf. p. 306.

Though it is always misleading to isolate fragments of Hegel's own writings, it is worth running the risk for illustrative purposes. That truth is a whole, "the whole," may be found as the thesis in the Preface to his *Phenomenology* (*Werke*, vol. II, Berlin, Duncker & Humblot, 1832), a thesis of which the whole work is the proof. "Das Wahre ist das Ganze," he says in a much-quoted paragraph (p. 16). "Das Ganze aber ist nur das durch seine Entwicklung sich vollendende Wesen. Es ist von dem Absoluten zu sagen, dass es wesentlich Resultat, dass es erst am Ende das ist, was es in Wahrheit ist; und hierin eben besteht seine Natur, Wirkliches, Subjekt, oder Sichselbst werden zu sein. . . . Dass das

Such an assumption may turn out to be justified but it can not be denied that it is an assumption. It has been pointed out in a note to an earlier chapter that even the self-sufficient depends upon a relational structure. So that whatever harm accrues from the relationally determined is not avoided in an absolutism. One may of course with Bradley deny the "reality" of relations,⁶⁰ in which case it would seem that the absolute was one in the sense of "the undivided and indivisible." Such an entity would, I suppose, be self-sufficient. But to prove the possibility

Wahre nur als System wirklich, oder dass die Substanz wesentlich Subjekt ist, ist in der Vorstellung ausgedrückt, welche das Absolute als Geist auspricht,—der erhabenste Begriff, und der der neueren Zeit und ihrer Religion angehört. Das Geistige allein ist das Wirkliche; es ist das Wesen oder Ansichseiende,—das sich Verhaltende und Bestimmte,—das Andersein und Fürsichsein—und in dieser Bestimmtheit oder seinem Aussersichsein in sich selbst Bleibende;—oder es ist an und für sich.—Diess Anundfürsichsein aber ist es erst für uns oder an sich, es ist die geistige Substanz. Es muss diess auch für sich selbst,—muss das Wissen von dem Geistigen und das Wissen von sich als dem Geiste sein, d. h., es muss sich als Gegenstand sein, aber ebenso unmittelbar als aufgehobener, in sich reflektirter Gegenstand. Er ist für sich nur für uns, insofern sein geistiger Inhalt durch ihn selbst erzeugt ist, insofern er aber auch für sich selbst für sich ist, so ist dieses Selbsterzeugen, der reine Begriff, ihm zugleich das gegenständliche Element, worin er sein Dasein hat; und er ist auf diese Weise in seinem Dasein für sich selbst in sich reflektirter Gegenstand.—Der Geist, der sich so entwickelt als Geist weiss, ist die Wissenschaft. . . ." (pp. 19–20). Cf. *op. cit.*, pp. 36 ff.

Royce's statement of the belief that the truth is a whole occurs in *The World and the Individual*, 1st series. Having defined an idea, its object, and truth (the real) as the "complete embodiment, in individual form and in final fulfilment, of the internal meaning of finite ideas," (p. 339), he lays down three criteria of reality, the final object of any idea. "(1) A complete expression of the internal meaning of the finite idea with which, in any case, we start our quest; (2) a complete fulfilment of the will or purpose partially embodied in this idea; (3) an individual life for which no other can be substituted." (pp. 340–41). While we could not go into Royce's reasons for holding this belief without an attempt—which would of course be vain—to summarize *The World and the Individual*, we can hint at his reason. In his own words, "The only ground for this definition of Being lies in the fact that every other conception of reality proves, upon analysis, to be self-contradictory, precisely in so far as it does not in essence agree with this one; while every effort directly to deny the truth of this conception proves, upon analysis, to involve the covert affirmation of this very conception itself." (pp. 348–49).

⁶⁰ In the well-known third chapter of *Appearance and Reality*, Bradley's argument is, roughly, that in the relation xRy , one is involved in an infinite regress since a relation is needed to relate x and R , S , and x and S , and S and R , etc., *ad infin.* If there be any distinction between a relation and a term, this criticism will easily be seen to arise from a confusion of symbols and what they symbolize. It has been itself criticized by Russell, B.: *The Principles of Mathematics*, Cambridge, University Press, 1903, vol. I, sec. 99; by Holt, E. B.: *The Concept of Consciousness*, 1914, pp. 25 ff. Cf. Meinong, A.: *Über Annahmen*, Leipzig, J. A. Barth, 1910, pp. 260 ff.

of self-sufficiency is not to prove the assumption, "Truth must be self-sufficient." With Truth so delimited, Absolutism becomes almost inevitable.

But now how is it possible for a system to include all other systems? Since a system rests upon consistency—non-contradiction—how can a system be generated whose postulates shall contradict one another, a prerequisite of any all-inclusive system? It hardly seems likely that such a demand can be met. The meeting of it is a test however of the satisfactoriness of any absolutistic theory of truth. Yet for the present let us state some of the best known reasons for absolutism, leaving the question of a system with contradictory postulates and of self-sufficiency till a later point.

It has been said that before a proposition can be either true or false it must have significance. Could we understand meaning, we might understand truth. Truth and falsity are often held to be sharply antithetical terms. But the absolutist does not hold to this opinion. He maintains that true and false are, as it were, extremes at the ends of a continuum, in relation to which all propositions are defined. In so far as a proposition has any meaning at all, it is true; in so far as it is without meaning, it is false.⁶¹

Since meaning occurs in greater and less proportions, the next step is to discover whence it comes. It is found to come from the relation a judgment or idea has to other judgments and ideas. None by itself has meaning.⁶² Before you can understand any bit of knowledge, you require a wealth of auxiliary knowledge. This is true of all knowledge. Hence the number of propositions is probably infinite.⁶³ Be the number infinite or not,

⁶¹ "Meaning" is a term in idealistic philosophy almost synonymous with "reality." (Cf. Overstreet, H. A.: "The Basal Principle of Truth-Evaluation," *University of California Publications Philosophy*, vol. I.) In the light of this, my statement of the equating of truth with meaning becomes more intelligible.

⁶² Cf. Royce's interpretation of one's attempt to describe himself as a creature living now. *The World and the Individual*, vol. I, p. 407-408.

⁶³ It would be hard to prove that the number was necessarily infinite since circular explanations or interpretations are possible. That is, there is no reason to suppose that it is illegitimate to bring out the meaning of proposition *t* by *p* when *t* has already been used to bring out the meaning of *p*.

we soon see that all propositions are bound up one with another by the very fact of their having meaning. This system, which must not be identified with a system derived through implication, will include contradictory propositions. For if the "explanation" or "interpretation" which produces it be at all akin to the "explanation" or "interpretation" which is used in daily life, it will be seen that a proposition gains meaning through its contradictories as well as through its implications.

Since this system is not a system of non-contradictories, it were wiser to give it a name other than "system," perhaps. It earns its justification for the name, however, by means of a second assumption, the assumption that relations are "internal." This means that the "essence" of an entity is determined by the relations the entity maintains with other entities. In other words, nothing is isolated except artificially; nothing is independent; relations "make a difference" to their terms; they genuinely "bind" entities to one another.⁶⁴ If this postulate be justified, then the world is a whole and the only whole which is a unity, which is isolated, which is an individual. Put that together with the identification of truth and reality and you see at once the gist of Hegel's dictum, "The truth is the whole." Since, in fine, only significant propositions are true, since significance is determined only by relations, since relations are "internal," since the

⁶⁴ Mr. Bosanquet expands the meaning of "internal relations" in the following way (*Logic*, vol. II, pp. 277-78): To begin with, a better name for them would be "relevant relations," "i.e., relations which are connected with the properties of their terms, so that any alteration of relations involves an alteration of properties and *vice versa*."

"The following reasons for accepting a doctrine of relevant relations appear to me to be unimpeached.

"(1) In a large proportion of cases the relevancy of the relations to the properties of the related terms involves a community of kind. You can not have a spatial relation between terms which are not in space, etc. . . .

"(2) There is further no case in which on philosophical scrutiny the relevancy of relations to properties is not perceptible. . . . Each of two or more terms can only be understood if all are understood. (Father and son, for example.) . . .

"(3) Relations are true of their terms. They express their positions in complexes, which positions elicit their behavior, their self-maintenance in the world of things. This is really the all-important argument. . . ."

Mr. Russell holds that this view would lead to the doctrine that "there can never be two facts concerning the same thing." (*Scientific Method in Philosophy*, 1914, p. 150-51.) But see Schweitzer, A. R.: "Some Critical Remarks on Analytical Realism," *Journal of Philosophy*, vol. XI, pp. 169 ff.

system of significance (truth) is after all the system of reality, then the truth is a coherent system of all possible propositions.

How much of this account—synthesized from many opinions as it is—is inference and how much is fundamental?⁶⁵ The internality of relations is fundamental and the identity of truth and reality is fundamental, or at any rate they are fundamental enough to take the place of postulates. We have no interest here either in refuting or defending them. We are interested merely in pointing out that they are fundamental to absolutistic truth.

In the second place does the account define a system which shall contain contradictory postulates or theorems? "Consistency" was earlier used to mean "non-contradiction"; it now means "participation in a significant whole." Certainly it can not be assumed that the two systems are one without proof. A system which is determined by non-contradictory propositions would at least seem to be different from a system which is made for the very purpose of containing them. They may of course be resolved by the process of "stabilizing," or of enriching, or of clarifying their meaning; then their contradiction would no doubt be removed. In that case, a system is created without contradiction and our test would not have been met. Or else their contradiction may not have been resolved: in which case you seem to have something quite different as we have said. It may be that in reality the two systems are the same. What is contradiction?

When this question is asked we simply want to know if the relation between two consistent propositions or—to be more liberal—between a proposition and what it implies, is identical with the relation between a proposition and what explains it, or brings out its meaning. Other aspects of non-contradiction will not help us in this difficulty, however interesting they may be both in themselves and for other problems.

⁶⁵ It is very difficult to find a word which will express what I mean by "fundamental." The words "assumed," "postulated," "presupposed," unfortunately connote "unproved," "taken for granted," and the like. What I mean by "fundamental," however, is in no sense of the word "the taken for granted." I mean those propositions which are necessary in order to imply the system. Such propositions may or may not be taken for granted and in the case of the internality of relations they most certainly are not. For the *Phenomenology* is Hegel's proof. A presupposition then is, as I use the word, simply the "converse" of an implication.

The only test we have that two propositions are non-contradictory is that they can both be true. We know that two propositions can both be true by symbolic means. What these means tell us—see the preceding chapter—is that if one is true there is no reason why the other is false. But, to repeat, the mere presence of non-contradiction never indicates the whereabouts of truth. We are then given the choice of either or both of two propositions when they are non-contradictory.

That the relation between two consistent propositions⁶⁶ is a different relation from the relation between the meaning of a proposition and what explains the meaning, can be seen from the following observation. In an implication-system only one of two contradictory propositions can have a place; in a significant whole both may—or must—have a place. A significant whole may well be described in the words of one of its advocates as “an organized individual experience, self-fulfilling and self-fulfilled.”⁶⁷ It may not only be an infinite but a “determinate infinite.”⁶⁸ It may—and probably will—be identical with the whole which is reality. But it is only the postulate of the identity of truth and reality which grants one the right to presuppose the quite other identity between such a whole and a whole derived from formal consistency—provided the latter be “truth.” Indeed it is not uncommon to hear absolutists ridiculing the notion of formal consistency’s being a valuable aid for attaining the truth.

It could legitimately be asserted that the two wholes could never be the same. For given an implication-system of whatever dimensions you please, another can always be found, that system whose postulates in part or as a whole are the contradictories of the postulates of the given system. It is easy to declare that the contradictions are “resolved” by their common interpretative

⁶⁶ The relation between two consistent propositions need not be confused with the relation of a proposition and its implications. They may or may not be the same; it is rather a question of our definition of “implication” whether any true proposition implies all true propositions or not. If we define “implication” so that this follows, then all true consistent propositions would sustain the relation of proposition and its implications. But even then the case would vary for consistent propositions which were not all true.

⁶⁷ Joachim, H. H.: *The Nature of Truth*, p. 26.

⁶⁸ The phrase is of course Royce’s. V. *The World and the Individual*, vol. 1, pp. 570 ff.

function in a significant whole. The resolution may yoke them to the same plow but their contradictoriness still remains.

So much might be granted and the discussion taken up from another point of view. Contradiction has a great deal to do with negation. Perhaps an exposition of negation would remove the difficulty. Such an exposition is invariably furnished by the idealistic school.

It is the peculiarity of the school to identify the true and the real.⁶⁹ It is also a peculiarity of the more Hegelian members to conceive reality in Heracleitean terms. But the Heracleiteanism of Hegel is of course not the unordered dance of the Greek; it is a steady progression whose law is known and formulated. As the law demands that of two contiguous stages the latter shall be in total opposition to the earlier, each stage is negation in reference to another. Thus all stages are negative and at the same time positive. Consequently negation is either denied altogether or made part and parcel of the scheme, as one wishes. Whatever one's opinion on that score, one sees that this metaphysics has no room for the sharp distinction between positive and negative which belongs to more naïve metaphysics. Hence the mere fact of two enormous contradictory implication-systems is no stumbling block to the idealist. They are both equally "significant" aspects of one whole, like the two flashing colors of a changeable silk.

From the start with formal consistency, we pass to degrees of truth, thence to contradiction, thence to negation. And we find all these concepts reinterpreted. There is no way of undermining such a method unless it be by undermining its fundamental presuppositions. He who would attempt it is confronted

⁶⁹ But see also Montague, W. P.: *A Realistic Theory of Truth and Error, The New Realism*, pp. 251-300, incl., for a view by no means ostensibly idealistic. Mr. Montague defines the real universe as "the space-time system of existents, together with all that is presupposed by that system." (p. 255.) "I shall use the term 'truth' to connote 'true knowledge' and the term 'error' to connote 'false knowledge'; hence the definition of truth and error will resolve itself into a definition of true and false. I hold that *the true and the false are respectively the real and the unreal, considered as objects of a possible belief or judgment.*" Lest one now ask Mr. Montague what space-time existent the word "truth" symbolizes that his definition may be shown to be no belief in the real, he adds that the definition of the real is superfluous and the true is the real according to anyone's definition of the real. I am not sure that Mr. Montague means by a belief *in* the real a belief *that* a certain entity is real.

with the magnificence of the *Phenomenology* as well as other ancillary volumes of later and no more original thinkers.

The approaches to idealistic absolutism are not yet all indicated. One more approach—in comparison with which the others seem to be mere tributaries—is the theory of “appearance and reality.” The initial distinction which gives rise to the theory is too familiar to need demonstration. The difficulty is the selection of a standard by which we can determine what is real in distinction to what merely seems to be real. All discussions presuppose two great mutually exclusive classes of being. But the criteria of membership in the different classes vary with almost every point of view. To the idealist of the type now under consideration, nothing is real unless it give evidences of unity and permanence. But unity is the unity of the self-contained, the “Whole,” and permanence is the permanence of the eternal, the “time-inclusive.” For that very reason none of our experiences are real. They demand unification and eternity. But such are achieved only by participation in a system which is one and eternal. That there is such a system is implied by the very incompleteness and ephemerality of what we know. For, in the last analysis, the fragmentary and the ephemeral are said to be self-contradictory and self-contradiction cannot be tolerated in Reality. The part contradicts itself for in its isolation it poses as a whole. The ephemeral contradicts itself, for it is gone as soon as it is asserted. The part then rests upon a whole, the temporal upon the eternal.⁷⁰ Without a rest of this sort they lose all meaning.

⁷⁰ For the dependence of the temporal upon the eternal, cf. Royce: *The World and the Individual*, vol. I, pp. 408 ff. “This university [of R.’s audience] is the living presence, in newly developed and growing form, of its own historic past. This is what the present University means. Its present is inseparable from its past. You too are yourself because at this instant you relate yourself to your own past. The meaning of the past is a necessity, if you are to give to your present any rational meaning. Nor is this true alone of your knowledge about yourself. It is true of the very Being that you attribute to your present facts. However rapidly any Being grows, its very growth means relation to its own earlier Being. And no recondite discussion of the supposed permanence of substance is in the least needed to remind you, even if you wholly abstract from the traditional doctrines of substance, that whatever novelties the present may contain, these very novelties get their character, both for you, and for anyone to whom they are real at all, by virtue of their relation to past beings and events, so that if, *per*

Such a meager account pretends to be neither criticism nor proof. It pretends to be merely the statement of another point of view. It gives us in fine an absolute system which is the real, a system at once a whole and a permanent whole. Our interest in it is whether it meets our early demand of furnishing a system with contradictory postulates. Other matters such as the soundness of the reasoning which produces it or the importance of its criteria of the real are not to our purpose.

One reason why this system does not meet our demand we have given above. Another is that the given system by definition resolves contradiction. If it does away with contradiction, if contradiction is the very mark of appearance, obviously we have here no system with contradictory postulates.

Not only that, it is—again by definition—transcendent of our experience. In that case how can it pretend to solve our problems, which are, at least in so far as they trouble us, human problems? They may be merely apparent, but, as Mr. Bradley himself admits,⁷¹ they none the less *are*. For the Absolute there is

impossible, the whole past of temporal Being were absolutely stricken out, the present, which would then involve no historical relations to the foregoing, no entrance of novelty into the old order, no growth, no decay, no endurance, and no continuance of a former process in new forms, would simply lose every element that now gives it rational coherence.

"Far then from being merely contrasted with present Reality, past Reality, viewed in general, is a correlated region of that very whole of temporal existence in which alone the present itself has any comprehensible place or even any conceivable Being. Nor can any fact of nature, however remote from us it now seems, be viewed by us as real without being caught in the net of this universal time-order."

This is a presentation of a doctrine which argues not from the logical significance of a relation to what it implies (for example, a "part" implies something of which it must be a part, i.e., a whole), but from "experience" itself. For an analog of Royce's conception of time, equally based upon "experience," see Bergson's description of the self's development in *L'Évolution Créatrice* (p. 2). Bergson of course has not Royce's conception of the time-process as a "whole." For Royce's discussion of Bergson in this respect, see *The Problem of Christianity*, New York, Macmillan, 1913, vol. II, pp. 154 ff.

⁷¹ *Appearance and Reality*, pp. 131 ff. "We shall have hereafter to enquire into the nature of appearance; but for the present we may keep a fast hold upon this, that appearances exist. That is absolutely certain, and to deny it is nonsense. . . . Our appearances no doubt may be a beggarly show, and their nature to an unknown extent may be something which, as it is, is not true of reality. That is one thing, and it is quite another thing to speak as if these facts had no actual existence, or as if there could be anything but reality to which they could belong. . . . What appears, for that sole reason, most indubitably *is*; and there is no possibility of conjuring its being away from it."

complete truth; for us there is only fragmentary truth. Ought not this fragmentary truth to be explained? How does it happen to be truth at all? Somehow or other some things are true. What are these things and why are they true? Lexicographical exercise is largely prescribed by the will of the exerciser, we admit. We can of course call anything "truth." But there is a truth accepted and believed in by mortals, and whether it fits into an absolute system or not, they have the right to waive such a matter and ask that their truth be accounted for, analyzed, described. If it turns out to be largely falsehood, not it but the postulates which led to such an opinion should be rejected. Why should one accept a theory whose outcome is the denial of the theory's subject-matter?

Such criticism seems permissible but we must abandon it for the application of the criteria laid down at this essay's outset. Let us not discuss the difficulties in the notion of degrees of truth, a notion implied by absolutistic idealism. Let us assume that all propositions are partly true and partly false and that truth is found only in "significant wholes."

Such a theory is not self-critical.⁷² For if truth is the whole, statements about truth are not true. They are additions to the whole. Or if they do not add to the whole—which they do not when the whole is infinite—they are at any rate not identical with the whole. But if they are not the whole, they are only partly true. Their partial truth in consequence involves the

⁷² This has also been pointed out by Joachim. (See *Nature of Truth*, secs. 60 ff., for a summary of his argument.) But Joachim is content with this negative position instead of suspecting that the presuppositions which implied it were questionable.

⁷³ V. Bradley, *Principles of Logic*, London, Kegan Paul, French and Co., 1883, p. 10. "Judgment is the act which refers an ideal content (recognized as such) to a reality beyond the act." Cf. his article, quoted above in note 58 (q.v.), "On Appearance, Error, and Contradiction," in which he says that truth demands "that the idea should in the end be reconstituted by the subject of the judgment and should in no sense whatever fall outside." (p. 158).

Cf. Bosanquet: *Logic*, 2nd ed., vol. I, p. 71, under the topic, the relation of judgments to "reality."

The following chain of reasoning, not found in any one author, will suggest the literalness of the text: All relations are internal. Therefore the knowledge relation, which is universal, changes its relata. But in judging we are assigning predicates to an object (usually held to be "reality"). Since reality is, by virtue of our first point, essentially

partial truth of absolutism. The difficulty then arises of determining how much of absolutism is true. The difficulty can only be solved when some means is furnished for measuring the amount of truth in any system. And we have no such means.

Hegel himself attempts to surmount this difficulty by pointing out that absolutism is the outgrowth through an inevitable process of logical development from all other theories of reality. It is not another theory, it is all other theories absorbed and unified. It matters not with what theory you start, if you carry on your deductions, you will in the end reach absolutism. Absolutism is then the whole and hence the truth.

This does not end the matter, however, for statements about absolutism are not absolutism—unless subject-matter and proposition coincide. This sometimes, if not always, seems to be the axiom of the absolutist; we have a number of statements that in judging the subject somehow extends itself outward embracing an external world.⁷³ Where this means that thought is a genuinely creative art, the—at any rate partly—voluntary behavior of a rational subject and not the mere irregular flurry of psychic somethings, ideas or images or what you will, it is a deliberate and no doubt justifiable protest against a certain type of psychology. In that case, however, its objects are not the “things” of the “natural sciences,” even when those “things” are said to be psychical in character. For the most rigid subjectivist would not deny the need of differentiating in his

homogeneous with “knowledge,” then judgment affects reality directly. The creative aspect of judgment becomes not the creation of knowledge but of an external “world.”

Here a subjectivism, very like that of the old-fashioned subjectivist, is introduced into a philosophy whose intentions are by no means prejudicial to that end. It is one thing to turn subjectivist because of your belief in physics; it is quite another thing to do so because of the “ego-centric predicament” plus the theory of internal relations. Even if relations are internal, the object, if existent prior to knowledge of it—logically or temporally prior—would have just as much influence upon the “mind” as the mind upon it. To argue that it is essentially “mental”—a procedure which sometimes is disagreeable to its very advocates—is to argue from a new, and often concealed, premise, a premise which would not follow from the postulate of internality. That premise is that in the ubiquitous knowledge-relation the referent is constitutive of the relata. According to the theory of internality, the converse of a relation is as constitutive as the relation. This of course is the idealist’s own reason for his repugnance to what he calls “abstract unity.” Just as the parts of a “thing” are chained together by indissoluble relations, so are relations wherever they subsist indissoluble. Hence there is only one “thing,” the whole.

psychical universe between the entities which seem to be psychical and those which do not. It would then follow that the subjectivist on his side would have to distinguish between a thought and its subject-matter, between a symbol and what it symbolizes.

When the act of judging is the embracing by a subject of his object and when it is inferred that a judgment and its "content" are identical, then we are likely to become involved in the classic paradoxes the solution of which Mr. Russell has attempted in his "theory of types." Without going into that, we can easily see that the whole body of propositions which make up absolutism may be true and only a part of those about absolutism may be true. An absolutist himself would be willing to admit that the proposition, "Absolutism is false" is false. But if that is identical with or part of absolutism, then absolutism is entirely or partly false. If it is not part of absolutism then absolutism is not the whole body of propositions. Moreover there is no reason *prima facie* why the contradictory of "Absolutism is false" should not also lie outside the system. If it does, then why is it true? Not because it has a place in a significant whole, we can say at once. Unless this reasoning be vicious we are again back at our start, namely at that point where absolutism appeared to be not self-critical.

Absolutism does not seem to meet the test of generality. It has its specific metaphysics, theory of judgment, logic of relations. Without the doctrines that relations are internal, that truth and reality are one, that reality is a self-contained whole, that judgments definitely lay hold of their subject-matter and change it to conform to their meaning, it is hard to see where absolutistic truth could find a footing. We must have some assumptions to be sure, but they need not be as specific as these. It is quite possible to formulate a theory of truth without respect to the nature of relations. The correspondence theory is a case in point. If relations are internal, then correspondence between propositions and facts changes the proposition and changes the fact. But correspondence is no more lost than it would be provided relations were external. Absolutistic truth however requires that relations be internal. The externality of relations would never

give one an idealistic absolute—at least not in the opinion of absolutists.⁷⁴ It sometimes seems as if the desire to substantiate a certain theory were more potent here than the desire to draw out of certain apparently true propositions their implications.

It is very well known that the methods of mathematical implication are not always the most fruitful for metaphysics and philosophy in general. Perhaps it is well that philosophy should be more loosely and spontaneously constructed. New discoveries are often made by freeing the imagination from close reasoning. But the rigidity of mathematical logic has surely its lesson, a lesson which can be learned without enslaving oneself to the teacher. If in this especial case the postulate that truth is identical with reality lead one to search for a morphological unity in the two, lead one to assert the partial falsity of isolated propositions and at the same time to assert their partial truth, then it would seem to follow that (apart from the fact that the very ideas which gave rise to these ideas were also mere fragments of a whole and not a whole) something is wrong somewhere, inasmuch as such findings practically deny the existence of the problem which they attempted to solve. If they do not deny the problem, they at least evade it.

It might be well here to ask an absolutist how he begins his ratiocination. Unless the total system is given him intuitively *en bloc*, he must begin with something. Now he will admit that some axioms are needed for inference itself, primarily the axiom, "Anything implied by a true proposition is true." If he will, he must admit that the postulates—or the initial propositions with which he begins his system—are themselves true. But how true are they? If they are only as true as other propositions, there is no reason to prefer them to other propositions. They should be as true as the system; they should be absolutely true. Royce insists that they are and in his Heidelberg address

⁷⁴ Cf. Mr. Bosanquet, for instance, *Logic*, ed. 2, vol. II, pp. 279 ff., where he argues that externalism implies a host of "tiny Absolutes," an absolutism which breaks down "if any of these Absolutes imply any term beyond themselves." (See also Bradley, *Appearance and Reality*, pp. 140 ff.)

Before criticising this opinion, the meaning of "implies" would have to be determined. It may be almost anything, as it is frequently used, from "has a relation to" to "is dependent upon."

indicates the way to discover them.⁷⁵ (Mr. Bosanquet however rejects this.⁷⁶) Granting that this way leads to the desired goal, how can propositions—isolated propositions—be absolutely true since they are not coincident with the Whole? To be sure, they imply the Whole—the whole absolutistic System—but they *are* it only as all premises are their implications. We might call this a potential identity, in the Aristotelian sense of the word “potential,” but it certainly is not “actual” identity. Is it, then, to be said that absolutism with all its transmuted contradictions is true in the same way as its postulates with all their potential absolutism are true? Or are the postulates true only because their implications are assumed to be true?

At first sight absolutism would seem to meet the test of catholicity better than the tests above. That it does not account

⁷⁵ *Wm. James and Other Essays*, pp. 187 ff. The most concise statement of the manner in which absolutely true propositions are discovered is given on p. 251, “An absolute truth is one whose denial implies the reassertion of that same truth.” In other words, *p* is absolutely true, when —*p* implies *p*.

Professor Urban furnishes an interesting criticism of this criterion of absolute truth. (Urban, F. N.: “On a Supposed Criterion of the Absolute Truth of Some Propositions,” *Journal of Philosophy, etc.*, vol. V, pp. 701 ff.) He first asks whether an apagogical proof demonstrates an absolute truth. If it does, he says, one can take a theorem directly proved, contradict it, deduce from its contradiction “a conclusion which contradicts any one of the propositions constituting the *nervus probandi* of the direct proof.” (p. 703). He finally gives a case in which there is a proposition obviously of only “relative” truth whose denial implies its assertion. “A man A owes to B the sum of \$5.06. B moves to another town, and asks A to send all the money by one money order and to subtract at once the cost of the money order from the original debt. In this case the proposition holds that A can not comply with B’s instructions. Let us start from the assumption that our proposition is false, i.e., that A can send the money in the way required by B. If the money is to be sent by one money order, A must send it either at the rate for orders from \$2.51 to \$5.00, which is \$.05, or at the rate of \$.08 for orders from \$5.01 to \$10.00. In the first case A would have to subtract \$.05 from \$5.06 which leaves \$5.01, which is accepted only at the rate of \$.08; but if A tries to send the money at the higher rate, he has left only \$4.98, which is forwarded at the rate of \$.05. In the first case A is \$.03 short, and in the second case he has \$.03 left. The very supposition, therefore, that A can send the money as instructed by B implies that he can not do it. The proposition is proved indirectly and the author’s (Royce’s) criterion for absolute truth is obviously fulfilled, but who will be inclined to call this proposition absolutely true?” (p. 204).

Cf. Bradley’s *Appearance and Reality*, pp. 136 ff. “Ultimate reality is such that it does not contradict itself; here is an absolute criterion. And it is proved absolute by the fact that, either in endeavoring to deny it, or even in attempting to doubt it, we tacitly assume its validity.”

⁷⁶ See note 54 for reference.

for meaningless propositions must not be taken with too great seriousness.⁷⁷ For absolutism, all propositions have meaning—otherwise they are not propositions. Does it account for false propositions? It seems in some of its expressions to identify falsity with the claim of a fragment of the whole to be a whole—which fundamentally would be no doubt an infringement of “the law of identity.” Since to be a whole is equivalent to being true, a false judgment is a judgment which claims to be true.⁷⁸ But do not all judgments claim to be true? As Mr. Joachim says, it is only when a man recognizes that he is in error he is on the road to truth.⁷⁹ Two consequences seem to follow, (a) that all propositions are false, (b) that only absolutists err.

The first consequence is not troublesome to an absolutist, for he agrees that here is an element of falsity in all propositions. This does not answer the question of what makes them false. Though all entities are characterized individually by two contradictory properties, one can not infer that the contradiction does not exist. If all men are both good and bad individually, for instance, we can not infer that there are no such things as good and bad. We may assume that the properties are not after all contradictory, but then the reason for the argument disappears. If we assume that they are contradictory, we must assume that they are distinct. And even when they qualify one entity—an apparent impossibility—their distinctness is preserved. So all propositions may be both true and false individually, providing such a case is not meaningless. But the dilemma that follows must not be shunned. If they are contradictory, they are distinct and can be “accounted for.” If they are not contradictory, why bother about them? It is very questionable whether an explanation which explains a distinction by proving that the distinction does not exist is an explanation at all.

⁷⁷ If absolutism admits only true and false propositions the attempted criticism on page 250 above is more telling. It was there said that the proposition “Absolutism is false” might well be said not to be part of absolutism, and that, were it not, its contradictory would not be a part. Its contradictory, if there be no meaningless propositions, would practically be ‘Absolutism is true.’ If this falls outside the system the truth of absolutism is not self-contained and the theory is not self-critical.

⁷⁸ *Nature of Truth*, p. 142. Cf. also p. 161, “. . . error, i.e., the fragmentary thinking which, claiming to be complete, is false.”

⁷⁹ *Nature of Truth*, pp. 138 ff. (sec. 51) for instance.

The second consequence is more disastrous. If error means a consciousness of error, a claiming, a conscious claiming, of self-inclusiveness for what is really dependent, surely the non-absolutist never errs. If he be the "plain man," he knows nothing of self-inclusiveness and dependence; he stumbles along as well as he can without knowledge of either metaphysics or epistemology. How then can he claim such things? As for the non-absolutist, he will be far from claiming goods in whose value he does not believe. The absolutist alone cares enough for this kind of truth to claim it for his opinions. If he object, saying that the others claim it though they know it not, that the claim is involved in the claim of truth, he presupposes the truth of absolutism. If absolutism is true, then obviously true propositions claim absolutistic truth. But it is the truth of absolutism which is the very question at issue.

An objection to this criticism may be that it is singularly blind to the manners of theorizing. A theory often defines certain facts in certain terms and then interprets other facts in these terms. Consequently it must be expected that the truth an absolutist talks about will be absolutistic truth. To illustrate this, consider the field of ethics. It is platitudinous enough to point out that the saint in one system is the sinner in another—that the Nietzschean saint will be the Christian devil.

So much is very telling as far as it goes, but it does not go far enough. If the Nietzschean said to his audience, "Take any good man you please and you will find that he emulates Zarathustra, that he exerts a master's will to power on all occasions"; and if Saint Francis were produced and the Nietzschean insisted that Saint Francis did exert his will to power—not as a "slave" but as a "master" (for that alone would make our analogy exact); and if he insisted that Saint Francis did all this without knowing it; then he would be doing what the absolutist—if there be such—does when he insists that men in error claim, whether they know it or not, absolutistic truth for their opinions.

Now finally, how are we to apply the absolutistic test of truth. Given Royce's "reflective method," we can be pretty sure of what we may believe with certainty. Believe with certainty, says

Royce, only that whose denial is self-refuting. This gives such propositions as "Some thing is true." and "There is no last prime number." But suppose we want to know when the war will end, or how *Edwin Drood* was to have turned out, or how many perpendiculars to any line can be erected at any point upon the line. What categorical imperative have we to determine our action at such times? The mere statement that the truth is the whole or that no answer to these questions will be more than partly true, is hardly serviceable. It is only something more detailed which will help us.

We must find out definitely how to measure amounts of truth and falsity. We must be given a technique that will isolate the elements of a proposition so that what is true about it will shine out amid what is false. We do not want either such a criterion as Mr. Joachim gives in his example of the lack of harmony in the Centaur, nor Hegel in his case of the sick man. For Mr. Joachim our idea of a Centaur is false to our idea of man and horse as physiological organisms;⁸⁰ for Hegel the sick man is false to the notion of man, which implies health.⁸¹ These criteria are

⁸⁰ Joachim begins the paragraph referred to by a statement of conceivability as the criterion of truth. To be conceivable means to be a significant whole. He then says, "In this sense a Centaur is 'inconceivable,' while the antipodes are clearly 'conceivable.' For the elements constitutive of the Centaur refuse to enter into reciprocal adjustment. They collide among themselves, or they clash with some of the constitutive elements in the wider sphere of experience, that larger significant whole, in which the Centaur must find a place. The horse-man might pass externally as a convenient shape for rapid movement; but how about his internal economy, the structure, adjustment and functioning of his inner organs? If he is to be 'actual,' the animal kingdom is his natural home. But if we persisted in our attempt to locate the creature there, we should inevitably bring confusion and contradiction into the sphere of significant being—so far at least as it is manifest to us in our anatomical and physiological knowledge, etc. . . ." *Nature of Truth*, pp. 66-68.

⁸¹ V. Hegel: *Logic*, tr. by W. Wallace, Oxford, University Press, 1874, p. 263. "In common life the terms *truth* and *correctness* are often regarded as synonyms. We often speak of the truth of a content, when we are only thinking of its correctness. Correctness, generally speaking, concerns only the formal coincidence between our conception and its content, whatever the construction of this content may be. Truth, on the contrary, lies in the coincidence of the object with itself, i.e., with its notion. That a person is sick, or that someone has committed a theft, may certainly be correct. But the content is untrue. A sick body is not in harmony with the notion of body, and there is a want of congruity between theft and the notion of human conduct. These instances may show that an immediate judgment, in which an abstract quality is predicated of an immediately individual thing, however correct it may be,

manifestly founded on the assumption of a basic standard with which all propositions must harmonize.⁸² The standard man is a well man. A sick man contradicts the standard. So much for terms. What is the case when we come to propositions. It would seem at any rate as if men sometimes did contradict the standard and thus be false to it. But propositions which said so would be true, upon any theory. If there be a world of Platonic ideas quite *χωρίς*, we might have an immutable standard with which our thoughts could tally. But the idea *χωρίς* is hardly attainable and as Hegel saw the standard must be immanent in the object itself. Our personal ideas change as we change, growing more "correct" or less "correct." But *what evidence have we of standards immanent in objects?* How are we to collect the evidence? It does not help us to say that the object must coincide with itself. For upon investigation we discover that the object's self, its "notion," is the Absolute. So that our question finally becomes, "How can we tell when an object is 'real' and when it is not?" (So much, even if answered, would hardly help us when we ceased discussing "terms" and turned to propositions.)

If one is satisfied with the theory of appearance and reality given by the Hegelian idealists, and with the assumption that the true is the real, then he has his answer all made for him: No object is real except the Absolute which is its own object. It would be mere repetition to criticize it here.

can not contain truth. The subject and predicate of it do not stand to each other in the relation of reality and notion."

Hegel thus is not differentiating between the truth of propositions and of "ideas," as his opening passage seems to indicate. Propositions may be both correct and true and correct and false. What he means by "correct," the correspondence theory, one might say fairly enough, calls "true."

⁸² This is somewhat suggested, though I am very liberally interpreting the text, in the opening paragraph of Mr. Bosanquet's chapter on judgment, *Logic*, vol I, p. 67.

VOLUNTARISTIC THEORIES OF TRUTH⁸³

The dogma that there is no immanent criterion of truth in objects, pronounced in the last chapter, is a denial in substance of the usual epistemological dogma of immediate knowledge. Before justifying our position, let us give our reasons for discussing knowledge at all.

The demand for applicability is at the back of our reasons for discussing knowledge. The demand for applicability is the demand that a theory of truth be what is ordinarily called "practical." A practical theory will do things which an impractical theory is unable to do. A practical theory of physics will furnish material which can be tested in the physical laboratory. A practical theory of economics will furnish material to be tested in the exchange.

Now for our purposes anything which is said about any subject-matter can properly be called a theory or part of a theory about that subject-matter. "Abraham Lincoln was a martyr to the cause of liberty," for our purposes is a theoretical statement (a theory) about Abraham Lincoln. "Rain is good for the crops," is a theoretical statement about rain. The difficulty is to tell which of these theories is worth knowing. For there is such a wealth of them that we must select. The number of statements about any subject-matter will obviously be equal to the number of relations the subject-matter sustains and that number is too

⁸³ Under the heading of "voluntaristic theories" I have grouped the work of Pierce, James, Dewey, and Royce, primarily, with suggestions from Vaihinger and Schiller, i.e., the work in the main of the pragmatists. To make a significant analysis of these theories in many ways different from one another, it was necessary to adopt a terminology more or less original. With that in mind I have tried to use words with as little technical connotation as possible. The terminology of Royce in *The Problem of Christianity*, vol. II, seemed best adapted to my purpose. But I do not intend by using it to bind myself to the development of the epistemology which Royce works out there.

Such words as "proposition," "constituent," "curiosity," "interpretation" are to be read with the greatest spirit of naïveté possible for a technical reader to assume. For they are not supposed to connote any specific theory of logic. To bring this out more fully I have tried to give alternative readings where there were technical suggestions.

great for human beings to comprehend in a lifetime. How then are we to choose?

All the statements may be consistent because they may assert entirely different facts. Consequently we can not be asked to select those theories or theoretical statements which are consistent. There is no deed to mystify the issue; the case is not out of the ordinary. It is solved when we remember how every question seems, as it were, to select its own answer. When you ask, "Who was Chaucer?" you know beforehand the kind of answer you want. It may be an answer giving you Chaucer's parentage, or his occupation, or his position in English letters, or the date of his death, or all these things and more. It is not so much a question of truth or falsity which determines what answer you want, but rather a question of your particular interest. To put it differently, you ask questions to satisfy a doubt. But a doubt is as specific a thing as what is doubted—though it is usually ill-phrased. Almost everyone knows how restless he is until the doubts he has are satisfied not vaguely, not generally, but with definiteness and specificity. This is an example of the way questions select their answers. It will be noticed that only men who "know the right answer" can ask clear questions.

So of all the countless things that can be said about truth, there is one thing in particular that we want when we ask, "What is truth?" It is the assumption of this essay that that thing is information not so much about the metaphysical status of truth but about its behavior in daily life. We must assume that truth exists and then we must set out to find ways of discovering it, of telling it from falsity, of using it after we have it. We want a statement in empirical terms of its habitat and genesis and, since it is a norm of knowledge, we want it to be a norm which we can apply. That there is such a norm is involved in the fact of truth's being in some sense of the word a human affair. It may also be a divine affair. But to state its divinity does not help us in our troubles unless we be gods. We are willing to accept an account of its divinity but we also want an account of its humanity. We have given to us as a starting point the fact that truth plays some part in man's life. Our search is to discover the part in man's life which it plays.

But truth is a property of man's beliefs, his assertions, his judgments, his knowledge. Therefore some study of knowledge is necessary. This does not mean a complete epistemology. It means simply a statement of the "given"—as it might be called. The given may be analyzed by an epistemologist or a psychologist into elements differing radically according to the analyzer's philosophic bias. But it must be remembered that no entity is destroyed by being analyzed. For a true analysis will present not only the elements but the relations between them. There is no reason why we should assert the greater "reality" of the elements. Hence there is no reason why we should not indicate certain peculiarities of knowledge so long as those peculiarities are not discovered as the result of a specific metaphysical assumption.

If we have then made clear why we are interested in knowledge, let us proceed to indicate what knowledge means for us.

It was said above that the existence of a criterion of truth immanent in objects was denied and that this denial involved a denial of the existence of immediate knowledge. Immediate knowledge is denied in order to preserve the homogeneity of "knowledge." If we are using a term, it had best mean one thing obviously; even the profoundest thinkers have confused the meanings of one term when they have admitted a plurality of meanings. "Knowledge," we believe, is one of these ambiguous terms. And its most distressing ambiguity arises from a confusion of "immediate knowledge" with "mediate knowledge."

Immediate knowledge has always been said to differ from mediate knowledge in several important respects. Among them are the following.

- (a) *Immediate knowledge is indubitable whereas mediate knowledge is dubitable.*⁸⁴

⁸⁴ Cf. Calkins, M. W.: *Persistent Problems of Philosophy*, 3rd revised ed., New York, Macmillan, 1912, p. 409, where the meaning of "immediate" is said to be "'unreasoned and consequently not demanding proof.'" See also Russell, B.: *Problems of Philosophy*, p. 235, pp. 210 ff. Mr. Russell does not seem to be absolutely sure whether we ever have indubitable knowledge, but if we have it will be immediate, in his own words, "knowledge by acquaintance." But see his *Scientific Method in Philosophy*, p. 68, where he seems more certain.

There seems to be some demand for basing our knowledge on something. A great deal of what we know is supposed to be inference and inference is only valid if it is based upon something true. This, as we saw earlier, is the reason why a purely "formal" theory of truth—the consistency theory—fails to solve our difficulties. It would seem as if truth were a function of "knowledge-getting" rather than of knowledge when got. But this is no more than the old adage that logic has no dealings with the truth. Consequently there must be some bits of knowledge which we can not doubt to serve as our logical underpinning. Such knowledge is called immediate.

Error, then, and uncertainty ought not to arise from the inferences made from the immediate. Because if the immediate is indubitable and is taken as the basis of our reasoning, and if our reasoning be accurate, then our results ought to be true and indubitable.

(b) *Since the immediate is indubitable, it is taken as the starting point for philosophy.*⁸⁵

This point is clearly brought out by the sensationalistic empiricists, who identify the immediate with the sensory. Hume, for instance, states definitely that the one test of cognitive validity is an idea's roots in the senses. We are to trace every idea to its source in an impression if we wish to discover its truth. The point is also made by James. It is moreover the central idea of mysticism.⁸⁶

⁸⁵ This is excellently brought out by Miss Calkins's exposition of personal idealism (*op. cit.*, pp. 406 ff.). After showing that the self is immediately given and describing its character in some detail (p. 408), she says in passing (p. 409), "Stress has been laid throughout this book on the fact that the *immediateness* of self-consciousness is the *starting-point of all philosophy, the guarantee of all truth*. I can not doubt, I know immediately, that I, a conscious self, or person, exist; and I must believe whatever is involved in this certainty of my own existence." (My italics.)

⁸⁶ See note 10 for a textual reference in substantiation of this claim. Mysticism, it should be added, is not supposed to find the validity of any idea in the idea's sensory origin. On the contrary, it usually denies any validity to sense-data. But its criterion of truth is immediacy—an unreasoned, face-to-face sort of knowledge, which exists in one case alone, the Beatific Vision.

- (c) *Immediate knowledge is often, though not always explicitly, said to be "appreciative," whereas mediate knowledge is then said to be less reliable.*⁸⁷

This does not mean that mediate knowledge is *untrue* but simply "cold," "devitalizing." For instance wares advertised must needs be "seen to be appreciated"; a blind man may know all about a color but can never "really know" the color; an eyewitness is held to be more reliable than indirect testimony (circumstantial evidence). These differences make immediate knowledge very much like, if not identical with, "acquaintance," and mediate knowledge like "description." Or again they seem to divide knowledge into the familiar *kennen* and *wissen*, knowledge-of and knowledge-about, perceptual and conceptual knowledge. The important point about this third distinction is not a matter of objects, but a matter of value-for-life.

- (d) *In contemporary introspective psychology, the objects of immediate knowledge are said to be the irreducibles of whatsoever stuff the mind is made of.*

Thus sensations are said to be immediately given and become a sort of mental (psychical) irreducible. Or "the self" is said to be immediately given and thus becomes a constituent part of one's consciousness. This indicates that immediate knowledge is supposed to be knowledge-of things, objects, terms, etc., whereas mediate knowledge is supposed to be knowledge-of truths, beliefs, propositions, etc.

⁸⁷ This is a point so commonplace that it is almost unnecessary to give examples. It is pretty nearly the fundamental assumption of Bergson in his *Introduction to Metaphysics* (tr. by T. E. Hulme, New York and London, Putnam, 1912). After pointing out that metaphysics is the science "which claims to dispense with symbols" (p. 9), i.e., of "seizing" reality without any expression, translation, or symbolic representation" (*idem*) he denies the adequacy of "images" to represent it (pp. 13 ff.). "But it is even less possible to represent it by *concepts*, that is by abstract, general, or simple ideas." (p. 15, italics in text). "The concept generalizes at the same time as it abstracts. The concept can only symbolize a particular property by making it common to an infinity of things. It therefore always more or less deforms the property by the extension it gives it, etc., etc." (p. 19). Cf. *op. cit.*, pp. 65 ff. See also James, W.: *Psychology, Briefer Course*, p. 14, under "'Knowledge of Acquaintance' and 'Knowledge about.'"

These four points are enough to show that there are weighty differences between the two sorts of knowledge. If these differences are ultimate, why should both immediate and mediate knowledge be called by the same name. If they are not ultimate, by what magic are they to be conjured away?

There are certain reasons why "knowledge" should be confined to "knowledge-about" or mediate knowledge. These reasons are, collectively, that knowledge, in the sense that it is something which can be called "true" and "false" and "significant," is always mediate knowledge. This is brought out more clearly by a reconsideration of the four differences just mentioned.

(a) It is fairly obvious that much of our knowledge is never doubted. I do not doubt that I am writing a doctoral thesis on truth; I do not doubt that I am tired of writing it; I do not doubt that the wind is blowing outside; I do not doubt that August 28 is the anniversary of Goethe's birth; I do not doubt that Berkeley was sincere, etc. There are a thousand and one things which I do not doubt.

But two questions at once arise. (1) Do I accept them because they are of a peculiarly indubitable sort of knowledge, and (2) have I an intellectual right not to doubt them?

(1) The first question is answered by simply scanning the list of beliefs which I do not doubt. The fact that I am writing a doctoral thesis may be immediately given; so may my boredom; but the sincerity of Berkeley—which I feel just as sure of—is no more immediately given than the other side of the moon (of which I am, by the way, also just as sure). Nor was it ever immediately given. I get at Berkeley's sincerity by no opening of eyes or ears, nor yet by a coincidence of my mind and his. It is an entirely different process altogether. And as in the case of most of those beliefs which are so certain the process is a passage from less to greater certainty.

Some of the certain beliefs are admittedly cases of the immediately given. But there is no ground for believing that that is the basis of their certainty. It is a mere accident of origin.⁸⁸

⁸⁸ For purposes of argument we are assuming that some knowledge is really immediate. Later on this will be questioned.

If it were more than an accident, I ought to be certain of all immediate knowledge. But there are plenty of sensations and hallucinations not only the existence of which but also the character of which is in grave doubt.⁸⁹ Essentially ineffable and hence incommunicable, the so-called immediate must in no way be confused with knowledge. It is easy to say that the senses do not deceive us, that they are always right and we wrong in interpreting them. The great query is, "Why should that be called cognition which is only a part of the materials of cognition, and why should that knowledge be called indubitable, interpretation of which is highly susceptible to error?" If the immediate is indubitable, it ought to be its own "interpretation." It ought to wear the garb of knowledge, if knowledge it be. It is, to be sure, very true that the senses do not lie; but neither do they speak truly. They sense. And it is only after long years of experience that their sensings are correctly interpreted and that the knowledge which results becomes indubitable.

(2) Have I a right, now, an intellectual right, to accept these beliefs which seem in part to be immediately given? The very question of an "intellectual right" throws the whole problem of doubt and certainty into another cast. It is the cast of Descartes, with his fearful searchings into the right to believe. It is the cast of the laboratory scientist, working year in and year out for what gleam of truth he can find. The twenty years of research which occupied Darwin before he published his hypothesis of organic evolution do not seem to indicate any certainty or cognitive value whatsoever in the given. Our intellectual right to accept beliefs is won and not given us. Could one feel legitimately

⁸⁹ Almost any sensation that is unexpected will be a doubtful existent. Often one hears sounds and sees sights and "can scarcely believe one's senses." Yet they are excellent sensations and upon investigation often turn out to be genuine cases, i.e., externally stimulated. Again when one is at a banquet, for instance, and tastes a new sauce, one has no doubt about the *existence* of one's gustatory sensation but has grave doubts about its identity. "Is it sherry, is it wine at all, is it . . . what can it be?" In the third place contemporary research in psychology is demonstrating more and more that *descriptively* there is no difference between an image and a sensation. (V. Titchener, E. B.: *Text-Book of Psychology*, sec. 61; Angell, J. R.: *Psychology*, p. 152; Calkins, M. W.: *First Book in Psychology*, 4th rev. ed., New York, Macmillan, 1914, pp. 14 ff., for agreement on the part of three authors whose fundamental psychological attitudes differ.)

certain of whatsoever facts are presented in immediate experience, it is highly improbable that over twenty-five centuries of European philosophy would have been devoted to doubting it. It may be, as has been said above, that much of our accepted truth is the truth of our immediate experience. It can not be that its truth is based upon and guaranteed by that immediacy.

If this be at all probable it will be seen (b) that the immediate can not be necessarily posited as the starting point of philosophy. Philosophy, according to the people who do posit the immediate as philosophy's starting point, seems to consist of those propositions which can be inferred from absolutely certain propositions. "What can I be absolutely certain of?" is the primal question of this group of thinkers. And since they believe that they can only be absolutely certain of the immediately given—a belief itself by no means immediately given—their philosophy usually consists of "existences." That is, their one anxiety seems to be, "*What really exists?*" They think perhaps that thus they are answering the question of "What does it mean to be real?" As a matter of fact they are simply pointing to an object whose existence they can not doubt.

It may very well be highly desirable to know what things there are whose existence can not be doubted, and we shall spend no more time on that point. Its importance lies in its showing us how limited the so-called immediate is in scope. Strictly speaking the immediate is mute. To smell a rose is to have an experience; it is not to be able to identify the smell. That is, no knowledge-about is involved in any knowledge-of. The most the immediate can say is, "Something is," or "This is." Hence its preoccupation with existence.

But, to repeat, the reason for accepting the immediate is not immediately given. There is no way of inspecting or of introspecting into the being of these axioms of method.⁹⁰ They may be necessary for all thinking, or they may be innate in the sense that they are instinctive ways of thinking, but they are certainly not seen nor intuited. If they were they ought to be more

⁹⁰ Cf. Royce, J.: *Sources of Religious Insight*, New York, Scribners, 1912, pp. 102 ff., the "religious paradox."

common, if not among "men in the street," at least among professional and reflective philosophers. It must in the last resort, however, be proved by one's biography. If anyone be convinced that the axioms of method, those propositions by which he guides his thinking, are given to him as the existence of himself or the existence of his sensations, etc., are said to be given to him, it is his bounden duty to make the experience articulate.

But the process of making it articulate is a process of mediation. When Descartes, who has been interpreted as an immediatist, for instance, tries to make intelligible the certainty he has of his own existence, he not only goes through a long process of initial rejections—of a high degree of mediation—but (in his *cogito ergo sum*) passes through a difficult piece of reasoning.⁹¹ The reasoning may not be syllogistic, but it is reasoning none the less. It involves classification, comparison, and the bringing of a particular instance under a general law. If he finds himself, he can not announce and identify his find until he has classified it. He can not classify until he has compared. And he can not—in a strictly logical universe—argue that doubting he exists, unless he assumes the validity of his reasoning process and then postulates the existence of a subject for all conscious processes. Descartes himself, to be sure, says nothing of this explicitly, nor was he working in a "strictly logical universe." He was working as we all work, in a tentative and groping way. The point is that even if he were possessed of some inward apprehension of himself, that inward apprehension did not become cognitive until it had been through the mill of mediation. Nor did Descartes start with certainty; he ended with it. Here, then, knowledge, even if it can be called "immediate" in origin, becomes "mediate" as soon as it finds philosophic voice.

But even though it may be granted that the origin of knowledge is no ground for its differentiation, how about (c) its "tone." Immediate knowledge whether sensory or intuitional, it is maintained, has more life, more "go" to it than mediate knowledge. Is it not true that men who lived in daily

⁹¹ For an interesting note on the pre-Augustinian history of this argument of Descartes, see Windelband's *History of Philosophy*, p. 277, n. 1.

acquaintance with Alexander the Great "knew" him in a much more satisfying way than they who have simply read of him? Does not he who reads an author's works "know" him infinitely better than he who knows merely at second hand?

It is very true that these observations are significant. The distinction between them is a very genuine distinction and one which has been felt by almost everyone. But in the first place in so far as they are both cognitive they are indistinguishable, and in the second place each takes on the character of the other in certain situations, i.e., any knowledge may be "appreciative" as well as "descriptive."⁹²

Whenever one expresses one's knowledge-of, one's appreciation of an object, he uses exactly the same form of expression as he uses when he expresses his knowledge-about. Whether I have been to Naples or not, my accounts are descriptive. Whether I have seen red or not, my accounts are descriptive. The very need of communication makes description essential to knowledge. If I have never seen red or Naples, my accounts of it—provided I have no imagination—will be less convincing than accounts which spring from "my own experience" but they will not differ in kind. They will both be knowledge-about.

Similarly seeing Naples and dying would not even be knowledge-of Naples. The simple drinking in of all the sensory accompaniments of the Neapolitan atmosphere would not in itself be more than a very delightful and varied experience. There would

⁹² The most classic account, I suppose, of the distinction between "appreciation" and "description" is Royce's in his essay, "Physical Law and Freedom" (Lecture XII in *The Spirit of Modern Philosophy*). The individual, emotional (p. 389), and fleeting (p. 393) cognitive experiences are appreciative. They have for their objects "values," the "self," "concrete universals" (pp. 394 ff.). The permanent, the categorizing (p. 390), the public (p. 392) cognitive experiences are descriptive. Their object is the world of "orderly universality" (p. 396) of "abstract universals." But Royce recognizes in part the interdependence of appreciation and description (p. 410). This is however not complete interdependence, for he makes appreciation fundamental to description (*ibid.*).

For a note on the terminology employed, see *The World and the Individual*, vol. II, p. 27, n. 1.

Royce's distinction, it must be added, is not that between "percept" and "concept" or between "knowledge-of" and "knowledge-about." One must be careful whether knowledge should be divided through its objects or through its inherent *epistemological* differences—"tone," for instance.

be no reason to call it "knowledge" however. It might be a stimulus to knowledge indeed; it might be the subject matter of knowledge; but to identify it with knowledge produces endless confusion.

Just as my "direct" experience of Naples when cognitive assumes all the aspects of mediate knowledge, so mediate knowledge itself can and does to certain men assume all the aspects of "direct" experience. The mature intellect can take all the pleasure of the most spiced sensations in the implications of a set of mathematical postulates. It must not be taken for granted that theory is a cold and lifeless affair.⁹³ Theory as well as practice has its excitements. For it is a practice in itself. The split made between the mediate and the immediate when we come to the sciences shows its artificiality more clearly than ever. More clearly than ever we see that the directness of the cognitive experience is a sign of the experience's subject matter and that, in intuitional behavior, one's attention is simply directed to another phase of the situation. Any cognitive experience then has its appreciative as well as its descriptive functions. This applies universally. In so far as an experience is cognitive, however, it must—at least for the purposes of this essay—be identical with that which is called "mediate." That does not deny the existence of other properties.

But if all knowledge is appreciative as well as descriptive, by what right do we insist that all knowledge is at base descriptive? The reason for this assertion is (*d*) that "immediate" knowledge is often assumed to be knowledge of terms, whereas "mediate" knowledge is assumed to be knowledge of "truths," "facts," "complexes," "meanings."

If there be a consciousness of terms and a consciousness of truths, then it is very important for our purpose that "knowledge" be used for the latter alone. Just what a consciousness of

⁹³ Cf. Santayana, G.: *Three Philosophical Poets*, Cambridge, Harvard University, 1910, pp. 123 ff.: "There is a kind of sensualism or aestheticism that has decreed in our day that theory is not poetical; as if all the images and emotions that enter a cultivated mind were not saturated with theory. The prevalence of such a sensualism or aestheticism would alone suffice to explain the importance of the arts. The life of theory is not less human or less emotional than the life of sense; it is more typically human and more keenly emotional, etc., etc."

a term is, other than knowledge—that the term in question *is*, does not seem easy to state. But assuming that there be such a thing, it is clear that in so far as it is cognitive it is knowledge of a “truth,” fact, etc. It is descriptive, for it is knowledge that the object exists, or is being “known,” or has some other property; it is mediated by whatsoever past experience is needed to make it articulate; and finally it turns into a relation in which the object-term (relatum) is not the term aforesaid but a truth, or fact, or complex, etc., however one wishes to name it. No longer is it a case of “Subject knowing the rose,” but a case of “Subject knowing that the rose smells sweet,” and the like. But when that happens, and the experience takes on a genuinely cognitive character, it is seen that this cognitive character is the mark of mediate knowledge rather than immediate. For this reason, then, we assume that knowledge, properly speaking, is neither indubitable nor un-mediated; that it does not split into kinds, one of which is peculiarly worth-while and a consciousness of a thing,” but that it is always mediated, seldom indubitable—and then only after long testing—both “appreciative” and not, and is a consciousness of fact or meaning.

So much then as a preliminary elucidation of what we mean by “knowledge.”

Out of these characteristics one ought to be able to indicate a theory of truth. The characteristic of most importance for such a theory is the process of mediation. For the result of this process is the certainty which marks the true, and the stimulus to this process is the very nature of the object of knowledge. The theory of truth which results is, I believe, the theory at the bottom of voluntarism. First let us discuss the object of knowledge and then the process of attaining certainty.

The object of knowledge is always something which is symbolized by a group of words beginning with “that.” Such a thing may (*vide supra*) be called a “fact” (Russell), an “assumption” (Meinong), a “relational complex,” etc. The most important property it has is organized meaning.

Anything which has meaning is a sign. A sign’s very being as a sign consists in its demand for an interpretation of its

meaning.⁹⁴ But signs differ in structure. Thus the word "red" is a sign; it stands for a color; it points to one thing; its meaning is its pointing to that thing. Again the sentence, "Red is a color," is a sign. But this sign is different *qua* sign from the word "red," though it too is a collection of sounds, in that its meaning points to another meaning; while sign, it is also the interpretation of a sign. The word "red," not the color, is a symbol of a color; the sentence, "Red is a color," is an interpretation of this symbol. Now one of the interesting features of this difference is that the word "red" loses all meaning when considered in isolation from other words and the object it stands for, whereas the sentence, "Red is a color," has some meaning as long as the meaning of the copula is known. "X is," for instance, means not very much perhaps, but enough to warrant a man's believing it or disbelieving it, affirming it or denying it, etc. Well, such signs as "Red is a color" are the only objects of knowledge.⁹⁵

Suppose now the word "red" to be uttered in the hearing of a company of human beings. The result would be a series of more or less individual reactions. These reactions might be a running to the fire escape, a looking about the room for the man whose name was announced, a query as to what had just been said, a query as to what is red, a wrinkling of brow over the unintelligibility of the whole affair, a starting for the telephone

⁹⁴ V. Pierce, C. S., "Sign," in Baldwin's *Dictionary*. A sign is "anything which determines something else (its *interpretant*) to refer to an object to which itself refers (its *object*) in the same way, the interpretant becoming in turn a sign, and so on *ad infinitum*." Cf. Royce, J.: *Problem of Christianity*, vol. II, p. 283.

⁹⁵ This is an obvious divergence from Royce, who seems to agree with Pierce that there are three kinds of knowledge with three kinds of objects: perception, conception, interpretation, with "things" (particulars), universals, and signs, respectively, as objects. Whether Royce would have modified this doctrine had he lived is only a matter of conjecture. The position of this paper is that perception and conception are not different from interpretation but that in so far as they are cognitive they are interpretative. This is in part, at any rate, the belief of Dewey, see particularly *The Logic of Judgments of Practice* (in *Essays in Experimental Logic*), particularly pp. 392 ff., as well as *The Control of Ideas by Facts* (*op. cit.*), p. 248. "Only as 'reality' is reduced to a sign, and questions of its nature as sign are considered, does it get intellectual or cognitional status."

"Objects" in this discussion—perhaps it is unnecessary to say—simply means the object term, the relatum, in the symbol for the knowledge-relative.

to summon an alienist, etc. Different as these reactions are, they are alike in one respect, in that they follow the doubt that at once has arisen in everyone's mind, "What does it mean?" In other words they are reactions which are attempted interpretations of the sign. The man who runs to the fire escape probably does so because in his community the word "red" means "Fire!" The man who looks around the room for the guest whose name has been called, interprets it as a proper name. The man who asks what has been said finds the sign meaningless. Similarly others interpret it as a sign of a color, of insanity, etc. Some consider the word in itself, others the word in the social situation in which it arises. The unusualness of a man's appearing in company and uttering one word evokes a host of reactions, all interpretative, and all perhaps wrong in their interpretations. As a matter of fact the man probably uttered the word to see what would happen.

Such interpretative reactions occur not only in response to words. Signs of all kinds make up our cognitive life. The engineer on the railroad reacts to a green light in a manner quite different from that in which he reacts to a yellow light. A red ball on a flagstaff means "Skating today"; a flag at half-mast means a death; a crowd on a corner means something interesting—fight or Salvation Army; a yellow flame means sodium; a clenched fist means the instinct of pugnacity; a run on the bank means a panic; a footprint in the sand means Man Friday; John Doe's finger print on the bloody handle of the dagger means that John Doe is the murderer; Professor Roe's buying a new horse means that his salary has been raised; the blotting of my fountain pen means that it needs filling; the raucous scream of the little boy next door means that he is not in pain at all but is simply angry; his mother's rushing out and petting him instead of spanking him means that she is a fool and will spoil him. There is scarcely anything about us that does not call out interpretations of a similar kind. And because of our interpretations we conduct ourselves in varying ways.

Now each of the signs noted above is susceptible to other interpretations. There is no reason why a red ball should denote

skating any more than the coming of the kingdom. It is as arbitrary a matter—or was at its origin—as algebraic notation. So too with those signs which have not been invented by human beings. Perhaps the little boy's mother is right in comforting him; perhaps his raucous cry comes because he has the whooping cough. Perhaps my pen blots because I have neglected to open it all the way out. Perhaps Professor Roe has been left a legacy—or is living beyond his means. Perhaps the yellow flame indicates an element not yet isolated. Such "misleading" interpretations—"misleading" is a remarkably accurate word—are as common as more exact ones. There is never any telling at the beginning how valuable your reaction may be.

But your reaction to such signs as these is a reaction to something not in itself knowledge. Though I react sympathetically to a woman's tears, interpreting them—maybe automatically—as a sign of grief, the tears are not knowledge. The knowledge involved does not come until later, perhaps after long reflection. It may then be "that tears are a sign of grief," or "that it does not pay to comfort all women who weep," or "that there may have been an element of artificiality in that woman's tears," and so on. But these objects are organized complexes, akin to a sentence rather than to a word. The simple sign evokes a response from the subject; this response is a mute or an articulate interpretation; the result is knowledge. The object of knowledge, which is the same thing as the interpreted sign, may in turn become a sign calling for further interpretation.⁹⁶

This indeed usually happens. It is the process which we call "reflection." When something is reflected upon, it is put in the harness of interpretation; its meaning is sought out more searchingly; its significance is analyzed; its implications are drawn out. But each step in the process is an interpretative response to a new sign.⁹⁷

⁹⁶ See Pierce, "Sign," *op. cit.*; also Royce's *Problem of Christianity*, vol. II, pp. 150 ff.

⁹⁷ Whether the number of interpretations is infinite or not, I hesitate to say here. It seems safe to say that the number of times interpretations must be made will be—or could be—infinite; but an interpretation at a later point might be a repetition of an earlier interpretation. However, see Loewenberg, J.: "Interpretation as a Self-Representative Process," *Philosophical Review*, vol. XXV, no. 3, May, 1916, pp. 420-423.

Such an epistemology excludes all talk of sensations, of primary and secondary qualities, of the "objectivity" of the physical world, etc. The mere sense-data are purely sub-cognitive. Epistemology can get along very well without them. They belong to psychology, and had it not been for psychology they would never have crept into epistemology.

This does not deny that there are sensations, and percepts, and concepts. It simply denies that they are knowledge. They may not only exist but indeed may be the elements out of which all mental processes are compounded. Any psychologist who chooses, say, any structuralist, may take the process of interpretation and analyze it into sensations and reproductive imagination, and what not. It is not only his privilege, it is his duty. But the results of his work need not prevent the epistemologist from continuing to talk about "interpretation." We have learned recently that hunger is "nothing but" the contraction of the walls of the stomach.⁹⁸ But that does not prevent us either from being hungry or from quite accurately describing our condition as hunger. There are probably as many psychological interpretations of "interpretation" as there are psychologies. Why should we sacrifice our given for the sake of another man's riddles. The epistemologist's problem is the comportment of knowledge, its logic, its validity, and the like. True its psychology is as interesting as any other problem; but in so far as its psychology is an analysis of knowledge, it is of no particular bearing on the results of epistemology. If its psychology affects the validity, say, of knowledge, then it might be of great importance. But what people have done in the past is to assume a specific psychology and interpret epistemology in its terms. Most of the problems of recent epistemological debate, for instance, seem to be bequests of sensationalism. There is no reason whatsoever for the acceptance of sensationalism as final. It is better to start with one feature of our conscious life—knowledge—and move on from that. Such a method may contribute to psychology, may be incorporated in psychology. But features of a psychology more analytic than this feature will be irrelevant.

⁹⁸ See Cannon, W. B.: *Bodily Changes in Pain, Hunger, Fear, and Rage*, New York and London, Appleton, 1915, pp. 251 ff.

It is possible, for instance, for a chemist to make a study of the comportment of water, just as some chemists specialize in carbon compounds. Now it might turn out that all substances were merely arrangements of homogeneous Democritean atoms. Qualitatively these atoms might be all the same. Would it be incumbent upon the water-chemist to reinterpret all his results in terms of these ultimate atoms, to deny that his water was anything more than an arrangement of these atoms? Or would it be incumbent on the atom-chemist to do his best to interpret the comportment of water in his own terms and let the water-chemist alone? The epistemologist is no more forced to "reduce" knowledge to the non-cognitive than the social psychologist is forced to reduce society to individuals.

This sounds as if the results of psychology were somehow contradictory to things which we have said. On the contrary the whole body of behavioristic and functionalistic psychology is in quite as much accord as sensationalistic psychology is in discord. The results of neither are of much importance to us, but it is interesting to note the early researches of Mr. Dewey in perception,⁹⁹ and the very recent work of Mrs. de Laguna,¹⁰⁰ which tends to confirm them, as well as the whole theory of brain-integration.¹⁰¹

⁹⁹ I refer particularly to "The Reflex Arc Concept in Psychology," *Psychological Review*, 1896, vol. III, pp. 347-370.

¹⁰⁰ de Laguna, G. A.: "Sensation and Perception," *Journal of Philosophy*, vol. XIII, no. 20, Sept. 28, 1916, pp. 533-537; *ibid.*, vol. XIII, no. 23, Nov. 9, 1916, p. 617-630.

¹⁰¹ Historically the voluntaristic theory of knowledge—so far only hinted at—is a development from idealism rather than from British realism. Immediately its sources are obviously Dewey and Royce.

The beginning of the movement which culminates in these thinkers, as of every other movement, is in Kant. The great discovery of Kant seems to have been that knowledge is not merely receptive but is essentially active and creative. Before Kant the mind appeared as a sort of mosaic, one group of whose stones was knowledge. After Kant the mind had a chance to grow, not by the simple addition of new pieces of mental elements, but by a sort of exfoliation. Not that every psychologist gave it this chance. We had associationism still to come. But the gate for an activist epistemology was open.

With Kant, as with the contemporary voluntarist, knowledge was not merely a subject matter. It was a subject matter organized according to definite laws—the categories. These laws, to be sure, were identical for all minds; the individual difference was a factor to be eliminated. But they were laws of knowledge and not of subject matter. The synthetic work of the subject was a handling of the things known. This is Kant's

Dismissing this question as it stands, let us return to our real issue. If knowledge is the interpretation of a sign, in what sense does it become true or false? By what sign in turn is that indicated? This is the second of our main difficulties, the first of which was the stimulus to interpretation.

Roughly speaking, an interpretation becomes true in the process of mediation. The most satisfactory interpretation of a sign will be the true interpretation, the least satisfactory the

"Copernican revolution" and essentially it is the program of the voluntarist.

"Essentially," however, must not be taken too seriously. For Kant's interpretation of the noetic act was far from that of our contemporary thinkers. For him there still remained prominent traces of a receptivistic theory of knowledge. The causally operative things-in-themselves show evidence of the Lockean—the Democritean—assumption that knowledge is a sort of impressed idea produced by a non-mental and "external" world. Their "unknowable-ness" again indicates the same thing, the confusion of "knowledge" with intuitive (*anschauliche*) presentations. But these things, important as they were in the history of Kant's epistemology, are not of course the gifts of Kant to the development of philosophy. His great gift was the mind's interest in knowing. It was no longer an impartial bystander.

The impetus after Kant towards voluntarism worked itself out in identifying the noetic act. The interests of the post-Kantians, though different from Kant's and from one another's, after all centered about the nature of this deed. In Fichte particularly you find such an interest. Fichte with his primal fiat, creative, volitional, and cognitive, above all might be called the most genuine ancestor of the voluntarist. But Fichte, because of his fundamental interest in metaphysics, made the very mistake of the sensationalists. Just as the sensationalist made and makes every contact of the mind with its objects an example of knowledge, so Fichte widened the scope of cognition as to make it not only creative of knowing but creative of the very world in which it was situated. When the subject becomes the maker of its objects, and when subject and object exhaust the universe, there is absolutely nothing left for the epistemologist to say. His subject matter has lost all meaning. It is no new lesson in philosophy that what you can say about everything is not worth saying. But for all that, Fichte did emphasize the Kantian attributes of cognition and explicitly made it an act of will, a moral affair.

The Hegelian contribution will be clearer later on. It is not so much in the matter of individual cases of knowing as in his theory of the active character of knowledge as knowledge. Dropping the details of the dialectic process, we can see in its general form two characters which will prove to be of particular value to our discussion. One is the theory that no bit of knowledge stands on its own feet, and the other—which for Hegel probably follows from the first—is the theory that truth is an aim, something to be achieved. These two points as developed by almost all Hegelians are, it must be admitted, very different from their analogs in contemporary voluntarism. Hegel's reasons which substantiate them, moreover, are not the reasons of contemporary voluntarism. But taken as very general epistemological points of view they are practically identical.

Passing over the thinkers who elaborate the views we have just suggested we come to the voluntarists of today. These thinkers are best represented for our purposes—which are not metaphysical purposes—by

false. An interpretation which is neither satisfactory nor unsatisfactory—which is indifferent—is meaningless. That this is not mere schematism may be seen if the growth of a sign's meaning is carefully observed in any case. As it happens there are very few meaningless interpretations, for the phrase is almost self-contradictory. The only indifferent objects of knowledge are probably those which have as yet incited no reflection on the part of the subject. Propositions taken from technical metaphysics and offered to an untrained mind will receive just this verdict. If such a mind is honest, it will say that it does not know whether the proposition is true or false because it does not know

Dewey and Royce. Dewey and Royce are in many ways diametrically opposed. Their ethics, their metaphysics, and their general way of doing things seem sprung from mutually hostile forces. But in both these men there is an identical account of what in general our ideas are and how they become true.

For both an idea is a "plan of action." This means that ideas do not stand for, do not represent—even in the political sense—"objects," things, particulars. It means that they are purposive and express what a man wants to do. Thus, for Royce, an idea of a house is neither a percept, a concept, nor an image of a house. It is essentially a plan of something to live in, something which will shelter us, something to invest in. It is thus, as was so clearly brought out in his *Problems of Christianity*, an interpretation of a sign. Interpretation in his earlier work had been called the "internal meaning" of ideas, the purpose whose "external meaning" fulfilled it.

In Dewey we have a presentation of this thought, strikingly similar not only in meaning but in phraseology. "It (an idea) is not some little psychical entity or piece of consciousness-stuff, but is *the interpretation of the locally present environment in reference to its absent portion*, that part to which it is referred as another part so as to give a view of the whole." ("The Control of Ideas by Facts," in *Essays in Experimental Logic*, p. 239. Italics in the text.) Also, as in Royce, ideas have an external meaning which is the fulfillment of their intentions. But whereas in Royce the fulfillment of an idea's purpose sometimes seems to be a "particular" (*World and the Individual*, vol. I, pp. 26 f.), in Dewey it is an act. *The Objects of Thought* (in *Essays in Experimental Logic*), p. 171, says: "So much for the thought-content or meaning as having a validity of its own. It does not have it as isolated or given or static; it has it in its dynamic reference, its use in determining further movement of experience. In other words, the 'meaning,' having been selected and made up with reference to performing a certain office in the evolution of a unified experience, can be tested in no other way than by discovering whether it does what it was intended to do and what it purports to do."

From this beginning the paths of Dewey and Royce diverge. For Royce's ethical and metaphysical interests led him to seek the nature of a universe which was known in this way. He early avowed that it was by an examination of our ideas that we could best learn the character of our world. Dewey's interests, on the other hand, have been of a more homely nature. They have led him into defining the noetic act psychologically and biologically and into defending his instrumentalism against the attacks of classicists. Consequently his fundamental agreement with Royce was only naturally obscured.

what the proposition means. It is only by a detailed interpretation of the proposition as a whole and in part that its meaning is elicited. Then only does the reflective mind become capable of deciding. Such is exactly the case with "propositional functions," the only one example usually given of meaningless propositions. But this obscures and mystifies the issue. Meaning is a human affair; it occurs in our daily lives; there are plenty of propositions equally meaningless. We do not know whether the propositional function, *x is a man*, is true until we know the value of *x*. Similarly we do not know whether the proposition, "Beauty is truth, truth beauty," is true until we know the values of "beauty" and "truth."

But whence arises this quality of being satisfactory? How does it account for "the control of ideas by facts"?¹⁰²

There are, one may say, two directions in which one's curiosity may lead one. Stimulated by any sign, one's curiosity may put the questions, "What is it?" or "What shall I do?" The answer to the first sort of question is a "descriptive" judgment; the answer to the second, a "practical" judgment. Both impulses are productive of knowledge; both are interpretative. On hearing a sound in the forest, one may be prompted to identify it, to interpret it as the wind, or as an animal, or as a human being, or as an illusion. Or again one may be prompted to flee from it or to approach it—to use the classical dichotomy of human reactions. Both of these are interpretative, and one of the most important features of the situation is that they are both one total reaction. The descriptive judgment and the practical judgment when they actually occur are inextricably interwoven.

It would be impossible for me to resolve to flee from a bear unless I were able to interpret it as a bear. But conversely it would be impossible to identify it as a bear unless I should feel inclined to run from it. Were I to feel every impulse to approach and pet it and ask it to "sit up" and "roll over" and "pray," I should never dream of calling it a bear. It is just where this vital connection has been overlooked that error creeps in. The child who tries to pick a bumble bee and says it is a pretty flower,

¹⁰² Obviously Dewey's phraseology. See note 101.

has not yet made differentiating practical experiments upon her pretty flower. The woman who wakes in the dead of night and boldly asks the swaying curtains what they want has not identified what she sees. One is a case of false description, the other of false practice.

But if the child finds that she can pick the bee and smell its fragrant odor and put it in a vase with the rest of her nosegay, she will have gone a long way toward verifying her initial interpretation that the bee is a flower. So if the suddenly awakened woman finds that the curtains mutter, "Hand out your jewels," or jump through the window, or gag her, she too will have verified her practical judgment, "I ought to question him." The child's descriptive interpretation involved a series of future and contemporaneous acts; the woman's practical interpretation involved a definite description.

Moreover the child would have been unable either to verify or disprove her descriptive interpretation without the aid of experimentation. Her interest in this case happened to be avowedly practical. She was in the garden to gather a bouquet. But even if she were there like a latter-day and more thorough-going Adam, simply to name the flowers, she could never have identified either flower or animal, or indeed any of the phenomena which throng a garden, without the application of tests, criteria of individual differentiation. Simply looking—assuming that looking is a mere reception—would never do the work. As I look out of my window at a pine tree nearby, I can not tell if that pointed black object near the top is a pine cone or a crow or for that matter a German submarine. It is by waiting for further developments, by experimenting, by inferring, by interpreting, that I discover what it is. A submarine would not be so small; why should it appear in Carmel, California; what business has it in the top of a tree? So too I work over my other interpretations until I verify one and disprove the others. But my verification of this simple description is a bit of practice.

Just as I can not answer the question, "What is it?" without experimenting and thus deciding upon a plan of action, so I can not answer the question, "What ought I to do?" without being

aware of the nature of the sign to which I am reacting, or at least forming an hypothesis about it. Ought I not in the face of the black thing, which grows more menacing as twilight draws on, to do something to protect myself and property against possible danger? It has a strange look about it; it is extremely ominous. It is best in these days of atrocities to be ready for anything. But my hands are tied until I can identify what I see, until I can make a descriptive interpretation of that sign. If it be after all nothing but a giant pine cone, then I have nothing to fear; but if it be a winged submarine, waiting only for darkness to do its deadly errand, I had better crawl into the cyclone cellar and telephone for the police.

But how am I to find out? And here I find myself back where I started, realizing that descriptive interpretations are possible only through practical interpretations and that practical interpretations are equally dependent on descriptive interpretations.

Since this is so it will be seen that the verification of any idea, the interpretation of any sign, is a very complex process, with descriptions and experiments thoroughly interwoven. However simple the question, a host of experiments must be performed before it will be solved. And were one to justify his every belief, one's life would be too short for the complete verification of one of them.¹⁰³ It is a commonplace, of course, that we do not stop to verify our every belief. We have short cuts to knowledge and they seldom lead us astray. Interpretation of certain signs becomes a matter of habit with us, like reading, and we do it instantaneously. Sometimes we are misled, just as when reading a foreign language we mistranslate. Our mis-translation makes a momentary "sense" and we do not discover our error until we have read the whole paragraph. Sometimes indeed it leads us to new misconstructions and where only a sentence was initially a blunder, a whole paragraph now becomes

¹⁰³ It is just this "practical" difficulty which makes Royce, in his own words, an "absolute pragmatist." *V. Wm. James and Other Essays*, p. 254. No idea—no purpose—is ever completely fulfilled in any man's earthly life. The complete fulfillment of all purposes is in that ultimate union of internal and external meaning which is the Absolute. This doctrine is, it goes without saying, due to other considerations besides the pragmatic nature of an idea.

distorted. Gradually our error dawns upon us. The paragraph is out of keeping with the general context. Something is wrong. The beautiful faith of a reader knows it is not his author. And so he runs back over his ground to discover his own misinterpretation.

The same thing occurs in social daily life and in the laboratory. The same sort of blunders, of errors, of misinterpretation; the same way of discovering them, and of correcting them; the same way of verifying what is suspected to be true makes the scientist no strangely isolated intellect, thinking in a way of his own which is radically different from the "plain man's," but an intellect one in structure and method with his fellow man's, less fallible because more careful of each step.

The care enters at the beginning of the scientist's work. He is more fully conscious than the untrained thinker of what his problem demands. He tries, let us say, to find out if poverty does usually lead to drink, as he hears sociologists say. Before he makes any investigations whatsoever he must know what facts are relevant and what are not. He must have a technique for the determination of his phenomena; of causation, etc. He must decide what would be true if his hypothesis were true. He must know what would never be true if his hypothesis were true. Only then can he proceed to verify it. This problem forms a little universe of its own in which he must live until its solution. If he can not find such a universe, which means if there are no signs of its existence, then his hypothesis is false or he has misunderstood the problem. It will be seen at once that in difficulty alone does this problem differ from any other.¹⁰⁴

But it is curiosity stimulated by the sign of a sign, by an already given interpretation. It is the curiosity stimulated by an object of knowledge, an organized complex, and not by a simple sign, a "term." It is, to give an example, the curiosity which puts the question, "What does 'Beauty is truth' mean?" It is not the curiosity which is stimulated by the contemplation of beauty itself and leads a man to frame for the first time an hypothesis about its nature.

¹⁰⁴ V. *Introduction to Dewey's Essays in Experimental Logic*, pp. 35 ff.

That type of curiosity seems more primitive, more elemental. In so far as it leads to interpretation it is no different from the other. Both are reactions to signs, but the signs to which they are reactions are different. Its elemental quality can be observed not only in children but in certain of the higher animals. Its satisfaction moreover comes to pass in the same way as the satisfaction of more sophisticated curiosity. It always occurs through doing something to something and seeing what happens. It is defying the law, putting metals in acid, imagining the behavior of two characters in interaction (*à la Zola*), sticking a pin into a toy balloon. So much is the result of curiosity. But if no interpretation is made afterwards, no knowledge has been obtained. For knowledge—it can not be said too often—is a mature and thoughtful affair. It must not be imagined to be the possession of every psychological specimen. Some people never learn from experience or instruction and there is no reason why epistemology should not exclude fools from its discussion at the outset. Fools exist nevertheless, and the fact that they must be excluded from epistemological discussion is a very important delimitation of epistemology's subject matter. (Yet I have no doubt that many an absolute cretin has a rich sensory life, much richer than that of our thinkers.)

When we experiment we must frame some hypothesis which we are about to test if our experimentation is not to be blind. And the hypothesis—like all doubts and questions—is determinative of one answer—its content in categorical form. The process of proof then is a fully conscious analog of the mediation of any interpretation. In proof we know what the solution must be. If the proof “comes out right,” it is valid and our hypothesis or theorem or thing to be proved is verified. It only comes out right if it does verify our hypothesis. In less formal matters a similar procedure takes place. For instance I resolve to work just till nine o'clock. My clock now indicates eight fourteen. That means that I have still forty-six minutes of work. Already I have made an hypothesis, “My clock is right.” But my clock has not been keeping good time lately. How shall I test my hypothesis? In this little room there are no other clocks. But

I can hear the town clock strike the hour. I shall wait then and if the town clock strikes nine synchronously with nine of my clock, my hypothesis will be verified. True the town clocks may not be right. My problem, however, is not concerned with them. For my purposes they constitute a court of high enough appeal. My hypothesis, "My clock is right" selects, as it were, the verification, "If it agrees with the town clocks." I wait and see and interpret what sounds I hear. Of course I may err. And of course I am using sense-data. But error is common to mankind in this complex life and will be detected in much the same way as truth. As for the sense-data, they are decidedly present and if I am not careful I may be deceived by firebells ringing at the same time. The sense-data are not my verification. My verification is my interpretation of them. There are plenty of sense-data about; I choose however certain ones which *mean* a certain thing.

This interpretation of my clock's being synchronous with the town clocks is the most satisfactory interpretation. It was selected by the question, "Is my clock right?" If my clock is right, it will be synchronous with the town clocks. If it is synchronous it will point to nine o'clock while they are striking nine o'clock. Such a procedure is as much an experiment as any that goes on in laboratories. And as such it furnishes an excellent example of a typical cognitive situation with signs, interpretations, hypotheses, experimentation, verification. A perhaps incomplete analysis of it would be: *signs*, (a) behavior of the hands on a clock dial, (b) the striking of the hour, both meaning the time of day, (c) the synchronous-ness of my clock and the town clocks, meaning their "agreement"; *interpretations*, of the meanings derived from these signs; *hypotheses*, (a) that the town clocks are right, (b) that my clock's agreement with them is a sign of its accuracy; *experimentation*, framing these hypotheses, testing my clock by means of them, waiting for results; *verification*, in the hoped-for agreement which will occur later.

What actually happens of course is no rigid method of research such as is indicated here. I suddenly decide to stop work at nine o'clock. I look at my clock and say, "Forty-six minutes to go." I then wonder whether my clock is right since it has

been fast recently. "I will be able to tell at nine," I think and let the matter rest there. But for all my method is rather slipshod, it is much more like a real piece of verification than any of the theories of truth considered in this paper provide.

But now someone will say, "You beg the question entirely by concealing the fact that you are looking for what *actually, really*, exists, and not for what 'satisfies' you." This objection means that voluntaristic theories disregard the question of truth and covertly introduce the test of correspondence. This is no doubt true of some writers with leanings toward voluntarism. But the theory as here developed does not overlook that difficulty. When it says, "At nine o'clock I shall be able to tell whether my clock is right or not," it does not mean that someone has now an "idea" of nine o'clock (idea in the sense of a complex of images) and that at a real nine o'clock there will be a fact—non-imaginable—corresponding to it, whence the truth of my judgment, "My clock is right." It means that the words "actually" and "really exists" must themselves be interpreted and that their interpretation will be like all others through signs; that these interpretations may be faulty or may be nice enough to be successful at their first formulation. For my purposes I find the town clocks fairly reliable; in Königsberg the people relied on Kant. It is all a matter of criteria. In the long run the town clocks may deteriorate. Their deterioration will however be given to us by means of certain signs. Nor will everyone agree about them. But until the matter is settled new criteria of chronometric accuracy will have to be found. Now Königsberg does without Kant.

These criteria seem, judging by many opponents of voluntarism, to be necessarily vulgar. "Voluntarism" then becomes a synonym for a shallow *laissez-faire* policy of anti-intellectualism. Since truth is "the most satisfactory interpretation," since it is "cash value" that counts, "satisfactory" must perforce be "anything one wants to believe," anything that is opportune, that "pays." Great as is the justice of such criticism, on the whole the voluntaristic school—if school there be—has no lower standards of truth than any other school. A sympathetic reading of

its works will show an ideal as lofty as that of the most traditional non-voluntarist. Voluntarism simply insists that whatever the standards, they are *standards*, and ought to be recognized as such. The *truth* of the consistency theory, of absolutistic idealism, etc., etc., must be tested as all truth is tested, it insists, and moreover the tests implied by these theories are themselves expressions of the same will to interpret as the tests of voluntarism. Are they not in so far true? In so far they are. But if a theory of truth must be tested by the four criteria suggested at the outset of this paper, they are not.

The selection of the four criteria was not justified when it was stated. It is perhaps proper at this point that some justification be made. But what can the justification be? If one begins one finds one's self in a totally different field from the field of truth. Take the criterion of self-criticism, for instance. This criterion is that every theory of truth must be true for the reasons it assigns itself. This seems a plausible enough demand. One makes it because one says to one's self, "My own theory, if it is going to repay the labor of constructing it, must be true. But if it is true it will be *because* it is true. That reflexive action is self-criticism." Now this clearly assumes that truth is homogeneous, that there are not several kinds of truth, one for one kind of proposition, one for another. When the possibility of heterogeneous truth is thought over, it does not seem impossible. It would make most critical arguments superfluous, for no one would be able to tell what kind of truth was involved in an opponent's point of view. But that would not be a very telling reason against it if one wanted to press the matter. Perhaps arguments are futile, and for that very reason. The answer to such a criticism must be pragmatic. If arguments are futile, why argue about the nature of truth? Why insist that the truth of such an argument is binding upon voluntarism?

The canon of self-criticism, then, is like all canons by no means self-evident. If it fails to make the meaning of truth clear and practical, it were better dropped. If it contradicts the knowledge which long experience has given us, it had better be dropped. Its justification must come about through the

application of the theory which asserts its need. The same thing holds good of the other three canons, catholicity, generality, and applicability. Their justification similarly will be demonstrated only through use. No claim is made in this essay that they are self-evident.

The theory of truth, now, which these criteria are asked to test is in summary as follows: Truth is a property of the interpretations of signs. Anything which has meaning is a sign. Interpretations have two consequences, mutually dependent, the first an identification of the sign, the second an activity on the part of the interpreter. The interpretation of a sign is not blind, it aims at fulfilling a purpose, which purpose may be called a plan of action (an ideal). Interpretations are tested for truth by experimenting upon them and seeing whether they fulfill their purposes or not. This can best be done by formulating the purpose as explicitly as possible. Such a formulation will provide the criteria of a satisfactory interpretation. The meeting of the criteria must itself be submitted to other tests and so on.

One of the first charges to be brought against such a theory of truth is that it is too specific. Other theories have been rejected because they have presupposed a sensationalistic psychology, a particular theory of relations, a receptivistic epistemology. Why is it any more permissible to assume an activist epistemology?

Our main presupposition was that foreshadowed in an earlier chapter, namely that a proposition is a sign, and that all objects of knowledge are signs. Our statement that knowledge is propositional was not so much a presupposition as a limitation of our field of discussion. The symbolic character of the objects of knowledge in itself may be disputed. It arose from the attempt to identify the act which a great part of modern epistemology believes to be the knowledge relation. But any receptive theory of knowledge presupposes so much more that the choice was easily made. Receptivism is false if ordinary sensationalism—or “idea-psychology”—is false. But knowledge may be the act of interpreting and the mind may be a substance, a mosaic of

"neutral entities," an integration of reflex arcs, a system of meanings, an epiphenomenal "accompaniment" of cortical events. For we have presupposed no theory of mind. All we have done is to take an act certainly noetic and certainly existent and discuss it. These theories may analyze it as they will. That is their affair. They can not deny its existence. Again knowledge may be the interpretative act and the world be monistic, pluralistic, dualistic; material, spiritual, neutral. We have presupposed no "metaphysics." True, our whole account may be the account of an illusion or of the very core of reality. We can study it in either event.

This may not be sufficient generality for everyone. Let his be the task to construct a theory more general.

The catholicity of the theory is perhaps more easily seen. Falsity, if it is to be satisfactorily accounted for, must not only be non-truth, it must be anti-truth. It is only a theory of truth based on an activistic theory of knowledge that can provide such a falsity. For in receptivism the false is received as well as the true. The false is then usually ignored or treated as an "illusion" or made an impression without a stimulus. A theory which looks to the future can afford to give falsity an important part to play. An interpretation is false which does not satisfy any of the criteria of satisfaction. Such interpretations might be called "misleading" or "unsuccessful" or "useless" as one chooses. The important point is that false interpretations—when they are known to be false—openly do not satisfy the inquiring mind. They raise more doubts than they should. They can not be verified. Experiments suggested by them are sterile.

For example, the proposition, "My watch is hanging from the ceiling," is false. To prove its falsity I must according to voluntarism make an hypothesis. My hypothesis, let us select the usual one, is "If my watch were hanging from the ceiling, I could look up and see it." I perform the experiment with negative results. My hypothesis, to be sure, may be questioned. The watch may have become invisible. In that case its presence on the ceiling would have to be detected by some other method. But whatever method were chosen, it could be tested in a similar way.

This proposition, to be sure, is one which is known at the outset to be false. Perhaps a fairer example would be one whose truth or falsity is unknown to begin with, which is proved to be false. It is impossible for us to give such an example in a paper of this sort, because any actual disproof of a proposition—whose truth or falsity is genuinely unknown—requires an elaborate training in the field to which it pertains. The result of our work might be merely to substantiate the proposition. Consequently the best thing to do is to turn to history. We find there scientists constantly disproving propositions. But their method is one in kind if not in complexity with the little example given above. If the doubtful proposition were true, the scientist says, certain others would be true. If it were false, certain others would be true. The tests are then made for the “others,” which others are taken as signs of the proposition’s falsity.

Again an objection will be raised that this procedure assumes the truth of certain propositions. It surely does up to a certain point, but that can not be taken as a confutation of it. Nobody ever begins any inquiry at the point where certain beliefs are absolutely true, undeniable, irrefutable. We are bound to assume the truth of certain beliefs if we are to advance at all. We might with a fair show of reasonableness be asked to start with the irrefutable, but the slightest experience with the elements of logic and metaphysics ought to convince one that these absolute truths are the hardest things in the world to demonstrate in such a way that anyone will believe them. It is not the results of a science that lack supporters, it is the beginnings. Hence it is a perfectly honest method to prove falsity via truth, since at any time one can be called upon to justify one’s truth.

It has already been shown how voluntarism accounts for meaningless propositions. A proposition has meaning only in so far as it is a sign. But like many other signs it acquires or is given meaning. Such signs are traditionally called “symbols” in distinction to “icons” and “indices.” The strange thing about propositions is that their meaning as a whole is different from the meaning of their parts. This is most accurately illustrated in the phenomenon of idioms. “What’s the matter?” if

taken word by word is almost unintelligible. But even idioms have meaning for someone and it may very truly be said that no sign is both a sign and meaningless. As soon as a proposition becomes meaningless it might be called no longer a sign.

The applicability of voluntarism must be tested to be demonstrated. Offhand we can only say, and it is an important thing to say, that it does not (like the correspondence theory, for example) preclude applicability. It aims at that point before all others; nay, it almost is that point. One must, to determine if any proposition is true, determine first the direction in which it is leading him, and second how far he can follow it. This is the only sign of truth that we have, namely, as William James put it, that the proposition can be verified.¹⁰⁵ This sounds like a circular definition. It is not circular, however, because for voluntarism verification determines the verity, whereas for other theories, verity permits of verification.

Finally, can voluntarism be criticised by its own criteria? This is the most potent question of all, and it must be admitted, the one by which any theory of truth stands or falls in the long run.

To begin with the theory is partly unsatisfactory for two reasons, both of which are very persuasive though not unanswerable.

(1) Voluntarism itself has no great following. True beliefs usually excite more or less general social agreement. The beliefs of "science," for example, are no sooner published with a record of their verification than they are incorporated into the great mass of belief. The beliefs of "common-sense" moreover promote a really formidable body of supporters. But some idealists and realists alike reject the doctrine of voluntarism.

The criterion of the *consensus gentium* is often scorned by theorists and often worshipped. There is a good degree of justice in both attitudes, for it is at once disgusting how the body of opinion can uphold what years of research have shown to be erroneous and wonderful how the simplest phrases of an ancient language seem to anticipate the results of these same researches.

¹⁰⁵ *Pragmatism*, New York, Longmans, 1913, p. 201. "True ideas are those that we can assimilate, validate, corroborate and verify, etc."

Every writer knows how convincing a demonstration of his ideas is their reflection in common speech and proverbial philosophy. And often there is enough insight to set philosophers pondering over the reasons for it. So that for all it is not an irrefragable argument, it should not be swept aside.

In the first place, the reason why voluntarism as it is manifested in pragmatism has produced so much hostility is that only one person, namely Vaihinger, has developed the theory by itself. James and Schiller have largely developed it as a polemic against supposed antagonism. This was no doubt inevitable since the theory was supposedly revolutionary, but it certainly prevented its classification. The exposition by James is picturesque and delightful but it is almost impossible to know exactly what it is all about. Where the literary amateur rejoices, the student of philosophy despairs.

Dewey and Royce did indeed develop their theories of knowledge in relative independence. But Royce's metaphysical absolutism (which is his solution of the peculiarly voluntaristic difficulties) is usually more prominent to a reader than his voluntarism. Dewey in his turn recognizes how his earlier accounts were colored by the terminology of his day, which was the terminology of the Post-Kantians.¹⁰⁶ Such an accident only too frequently shunts a reader's attention from the meaning of the theory itself to the meaning of the words.

Because of the usual reluctance to change on the part of men who have made up their minds, more time has been spent in battling over a doctrine which has never been understood than in finding out what it was all about. Hence, nobody seems to be quite sure what voluntarism is beyond the fact that it is false.

(2) As a result of the general obscurity and of the intellectual license obscurity always encourages, scores of writers who call themselves "pragmatists" or "voluntarists" have sprung into prominence because they have the gift of facile expression. Of these nothing shall be said here except that their existence is the strongest evidence of the pragmatic unsatisfactoriness of pragmatism.

¹⁰⁶ See *Introduction to Essays in Experimental Logic*, p. 26.

But both of these arguments are outweighed by certain favorable arguments.

(1) A voluntaristic theory of truth, as suggested in this paper, demands a statement of the tests a theory must meet before it is verified. This statement was made at the outset of our inquiry. We have tried to show how voluntarism meets three of these four tests. Since they are all four tests of satisfactoriness and since satisfactoriness is one of the four, the meeting of three of them ought to be pretty good evidence of the meeting of the fourth. But there are subsidiary reasons.

(2) The voluntaristic epistemology does away with the trouble-breeding distinction between scientific and philosophic knowledge. The difference between scientific and philosophic subject-matter and the difference in the attitudes of the disciplines themselves presented a puzzle to men who believed knowledge to be a sort of revelation. Since the scientist was talking about "things" which were sensible and the philosopher about general "truths," etc., the philosopher was said to be embarked upon an enterprise of "evaluation" or of "explanation," whereas the scientist simply "described." The scientist's knowledge was then conceded to be good enough in its way, but it told you "how," not "why." Philosophers then either evaluated the scientist above the philosopher or the philosopher above the scientist according to which kind of knowledge they could account for.

When it occurs to one that knowledge is after all homogeneous and if it is knowledge it will stay knowledge no matter what the end for which it is sought, one begins to seek those characters by which it is marked in all fields. He soon discovers that this very procedure marks him as a scientist. For he is formulating hypotheses as scientific as any chemist's and as speculative. He realizes that he too is interpreting signs.

(3) He realizes that because he elected to study the certainty of knowledge—if that be his interest—his knowledge is no more (or less) certain than that of men who elected to study molecular physics or histology or astronomy; that if it be certain, it will be so for exactly the same reason, namely that it has stood every

test he can devise to try it by. He realizes that all his tests, non-contradiction, apagogic-proof, coherence in a significant whole, and the like, are themselves signs whose meaning must be elicited in exactly the same way as the meaning of the sign which they are trying to interpret. He realizes that all these efforts are attempts to satisfy that very human and hence divine instinct of curiosity. At any moment his philosophic interpretations of the world as a whole may have to be rejected in favor of a more sturdy one, just as the scientist's interpretation of the world in part—if this be a distinction between scientist and philosopher—needs constant revision or increasing substantiation. Philosophy because of its very claim to be fundamental—not in spite of it—ought to proceed more cautiously and deliberately than the special sciences.

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